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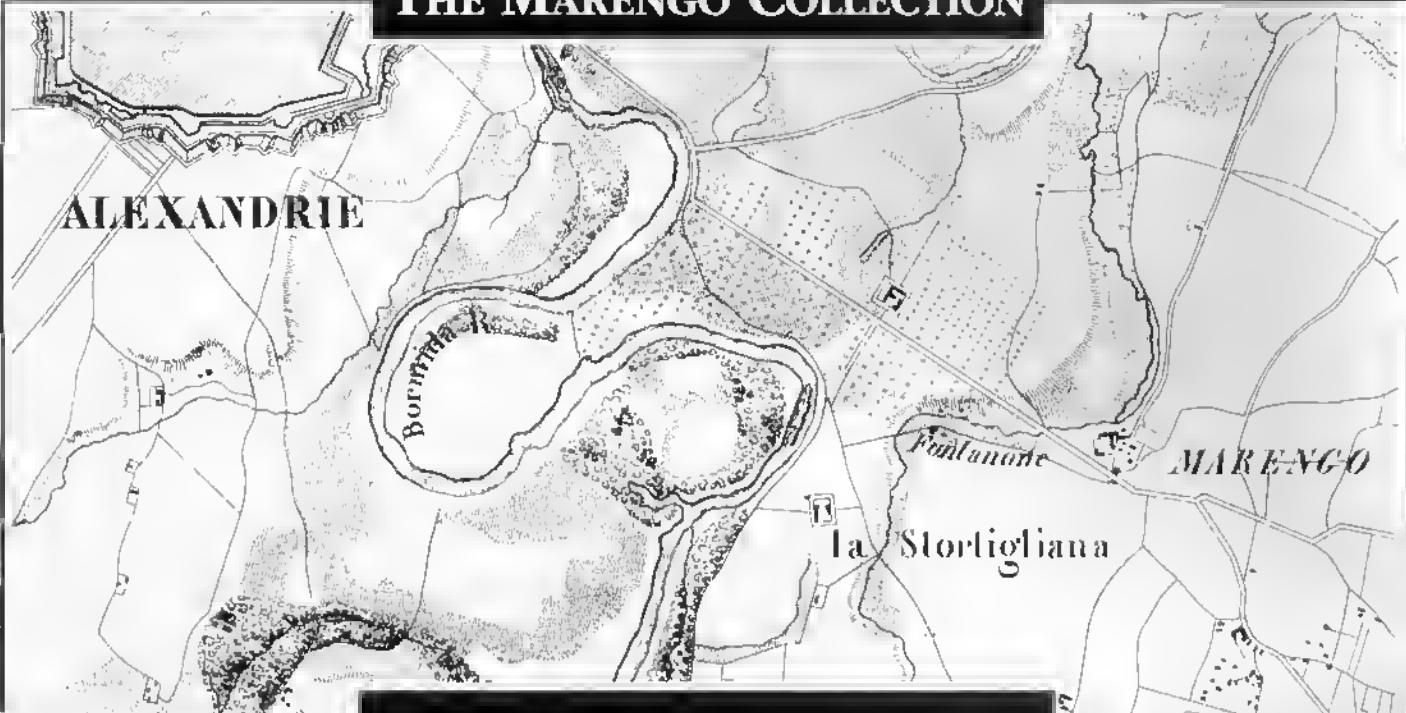
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PAST & PRESENT

No.27

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AUGUST 1990



Our cover illustration shows Bill Linton's model of an officer of the 42nd Highlanders, 1854, part of his Gold Medal winning exhibit at the 1990 SCAMMS show; see p. 35.

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EDITORIAL

We are happy to welcome to our pages in this issue Ian Sadler, who contributes the first part of an article on the controversial British 1942 Battle Dress Mk. I. He, born in Birkdale in 1947, is a keen figure and vehicle modeller and has been a militaria collector since the 1960s. He left secondary school without formal qualifications; he has no formal training in research, and works full time as an electrical fitter. He has had small articles published before, but nothing so demanding as his piece for 'MILITIA' and specifically wishes us to mention that he suffers from dyslexia. He hopes that his article may encourage other sufferers to try to overcome their difficulty — a sentiment we warmly endorse.

Our article on the remarkable full-scale reconstruction of a medieval trebuchet is the work of Peter Vennring Hansen, whom we welcome as our first contributor from Denmark. Dr. Hansen, born in 1954, has an MA in prehistoric archaeology

Fashions, current news and curiosities are just a few of the factors which play their part in influencing the antiques and collecting trades. At the moment it is the Second World War 50th anniversary syndrome which is probably exerting the greatest influence. The May celebration of the Dunkirk evacuation has helped maintain interest. The number of notices announcing forthcoming sales with a Second World War connection continues to increase, and at the moment the Battle of Britain is in fashion. In addition to sales and exhibitions a crop of souvenirs and memorabilia is being produced, some of which may well be future collectors' treasures.

Does this growth of interest explain the slight but general increase in prices of Third Reich material? At Phillips' sale of arms and armour on 3 May all the edged weapons of Nazi Germany sold at figures generally above the top estimates. Two naval officers' daggers sold at £150 and £170, both with top estimates of £120. Two Luftwaffe first model daggers sold at £220 and £230 with top estimates of £200. There is per-



Ian Sadler



Peter Vennring Hansen

from the University of Copenhagen; since 1986 he has worked at the Museums of Falster Mølle in south-east Denmark, with periodic excursions to join digs in Denmark, Germany, the USA and the Middle East. He has published several scientific and popular articles and books, mainly in the field of experimental archaeology. We find his report on the trebuchet project fascinating, and we're confident readers will, too. This is one of the kinds of subject which this magazine was founded to publish. If anyone reading this issue is professionally engaged in this type

of work, and could submit articles on similar reconstruction or 'weapons effect' research, we urge them to contact the Editor.

Addenda

Dr. Erwin Schmidt tells us that he has had — no late to include it in the second part of his article on Boer uniforms ('MILITIA' No.26) — of a surviving tunic which adds to our knowledge of Transvaal Startsartillerie uniform. Mr. Field Hazell of Langley, British Columbia, Canada, has kindly supplied a photo and description of a dark blue undress tunic. This has six yellow metal front buttons, and four pleated, buttoned patch pockets. There is black braid along the short stand collar, and twisted shoulder cords resemble those on full-dress tunics. The tunic has a Pretoria label, and an accompanying note attests to its capture at Talana Hill by a Dabir Fusilier.

Folkestone Airshow

One of the most spectacular events connected with the Battle of Britain 50th Anniversary will be held at Folkestone, Kent, on 9 September,

This will be a display by historic aircraft, and the promised attractions are mouth-watering. In the course of a three-hour display over the Lees, on Folkestone's seafront, we should see (among others) a Spitfire Mk.IX, a recently restored Hurricane XII, a Messerschmitt, a P-51 Mustang, a P-47 Thunderbolt, a Mosquito, and the Gladiator; the Battle of Britain Memorial Flight of a Spitfire, Hurricane and Lancaster; and jets from three different air forces. The event is organised by the Duxford-based Fighter Collection of World War II aircraft in conjunction with Shropshire Council as part of a week-long Battle of Britain festival, in aid of the RAF Benevolent Fund and the Kent Battle of Britain Museum at Hawkinge just outside Folkestone.

(This latter, an extraordinary private museum, is well worth a visit. The following weekend, 15/16 September, it is the venue for a remarkable display by large-scale flying models of the Concorde Flying Club — this will feature dog-fights by models with wingspans of up to 30ft., complete with simulated gunfire and bombing.)

£2,300, and another similar went for £3,000.

Although swords usually sell well, perhaps more surprising were the prices paid for a Victorian Household Cavalry trumpet banner (£2,600) and a Victorian cavalry Union standard (£2,400). As might be expected the very decorative dress helmets of the Household Cavalry realised extremely good prices. A Victorian example sold for £3,000 — top estimate £2,000 — and a later, post-1902 helmet sold for £2,600 — top estimate £2,200. An impressive Victorian helmet of the Honourable Corps of Gentlemen of Arms made £2,500, which was the low estimate.

Uniforms are a rather specialised collector's market and most pieces sell fairly cheaply; even that of an admiral of the fleet made only £280. A mixed lot of Hussar and RAF uniform items sold for £150. The demand for separate items of uniform varies quite considerably; sabre hilts of cavalry units usually sell well, but those of the Royal Artillery, which are far more common, realise something like half the price of a good cavalry one — £100, against £280 for one of the King's Dragoon Guards.

A sale of arms and armour at Christie's included a piece of finely decorated armour from a very well documented harness in Vienna. A determined buyer soon pushed the price up to an astonishing £68,000.

June and July promise some interesting sales; Sotheby's have one of their usual good quality sales on 28 June, but the one which looks set to break records is on 3 July. This will be the first part of the Visser collection of top quality firearms and edged weapons. This is one of the last of the great private collections, and the catalogues should prove a useful reference book for a long time to come.

Frederick Wilkinson

THE AUCTION SCENE

lapse an implied comment in the fact that an officer's sword sold for £95 after a top estimate of £100!

High prices were not limited to the edged weapons; a number of mixed lots of Third Reich material all did well. A letter signed by Hitler, dated February 1940, sold for £220; and a Knight's Cross realised a surprising £1,050. A First Class Olympic Games decoration, top estimate £600, realised £820.

The increase in demand reflected by these higher prices is particularly interesting, for it raises a question or two. The collecting of Nazi material has been through some traumatic times. Following the Second World War a natural aversion meant that while there was plenty of material about, hardly anybody was interested, and prices were at rock bottom. As memories of the war faded a little interest gradually developed and prices began to climb; and even in the 1950s these higher prices began to attract the replica industry.

Copies, perhaps more recently called fakes, began to appear; as so much Nazi regalia was machine mass-produced copying was not too difficult, and badges, edged weapons, and eventually complete uniforms appeared on the market. Soon the flood had undermined collectors' confidence; there was a reluctance to buy, and prices dropped as the number of collectors fell. Books advising on how to recognise the copies subsequently appeared; and now a measure of confidence has returned. As these rising prices mean that dealers and collectors feel more confident that they can recognise the 'wrong' ones, or thus it simply means that there is less discrimination?

While Third Reich material predominates, there is a sustained interest in all German military, though the prices for Imperial items seem to remain fairly static. In the same sale Pickelhaubes sold at around the mid-estimate figures, ranging from £110 to £190.

The Allied side was represented mainly by an RAF pilot's long hook and sundry other Second World War items which fetched £480, and a collection of 50 propaganda posters which sold for £550.

Grenade material was not the only section to sell well; the same sale included a particularly good collection of Household Cavalry items. The swords, with their rather elaborate decoration, made very high prices; one which had belonged to the 7th Lord Rodney, dating from about 1875, sold for £1,900 (estimate £1,200-£1,500), and another belonging to the 1st Baron Daizell circa 1850 realised £1,800. An earlier example of the 1814 Household Cavalry officer's state sword sold for



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ON THE SCREEN

Video Releases to Buy:

'Ran' (CBS/Fox:15)
'Kagemusha' (CBS/Fox:15)
'The Robe' (CBS/Fox:U)
'Deneitrius and the Gladiators' (CBS/Fox:PG)
'Cleopatra' (CBS/Fox:PG)
'The Ten Commandments' (CIC:U)

CBS/Fox have released on 'sell-through' two recent films by the renowned Japanese director Akira Kurosawa. *Ran* (1985), reviewed in 'MI' No. 9, was an adaptation of Shakespeare's King Lear transposed to 16th century Japan. *Kagemusha* (1980) is about a condemned thief who is forced to impersonate clan chief Takeda Shingen to disguise the fact that he has been mortally wounded while besieging his enemies in Noda Castle. The 'Kagemusha' (shadow warrior) successfully convinces Takemaru, Shingen's grandson and heir to the throne, as well as Shingen's enemies. However, his enemies, led by Tokugawa Ieyasu, sense a ruse and prepare a testing attack on the previously impregnable Takanenji Castle.

The production boasts two large-scale battle scenes which feature thousands of extras. The last depicts the battle of Nagashino in May 1575, considered a turning-point in Japanese military history. The Takeda clan attacks the combined forces of its rivals, led by Oda Nobunaga. Their cavalry and infantry charges are slaughtered by lines of harquebusiers, correctly shown firing volleys by ranks from behind a protective bamboo palisade. *Kagemusha* was one of the most expensive Japanese films ever made, and boasted both George Lucas and Francis Ford Coppola as executive producers. Kurosawa made exemplary use of colour and spectacle, and the film, like *Ran*, remains essential viewing for anyone with an interest in Japanese medieval history.

Although Cinemascope was by no means the first wide-screen process, it was introduced by Twentieth Century Fox in a bid to dissuade cinema audiences from deserting to television. The first production released in this process was Henry Koster's *The Robe* (1952), based on the novel by Lloyd C. Douglas. Richard Burton starred as Marcus Gallo, a Roman tribune who is banished to the garrison at Jerusalem after offending the Emperor's nephew, Caligula (Jay Robinson). He wins Christ's robe while supervising the Crucifixion, but it is his Greek slave Deneitrius (Victor Mature) who first realises its significance. Although slow and solemn the film was a box office success, and resulted in a much more lively sequel called *Deneitrius and the Gladiators* (1954), directed by Delmer Daves. Here, Deneitrius is not only sentenced to train as a gladiator, but has to contend with Caligula, by now emperor, and the evil and sensuous Messalina (Susan Hayward). The scenes of gladiatorial combat are well handled, and Jay Robinson again gave a fine performance as Caligula.

Popular Hollywood films broadcast on television in this country are normally framed to fit the television screen. With widescreen processes this inevitably results in the loss of up to half the image. Both BBC and ITV habitually 'pan and scan', thereby introducing camera movement and cuts where originally there were none. It is therefore to CBS/Fox's credit that they have released *The Robe* in its original Cinemascope format. What is lost in terms of image size is more than compensated for by the retention of the original photographic composition and editing; a far more satisfactory solution which makes the purchase of a cassette a more worthwhile proposition. It is to be hoped that other video companies will take note and follow suit.

CBS/Fox have taken the same care with Joseph Mankiewicz's *Cleopatra*

(1963), starring Elizabeth Taylor as the eponymous Egyptian queen, Richard Burton as Mark Anthony, and Rex Harrison as Julius Caesar. Public interest in this troubled production was ensured by the well-publicised affair between two of its stars. This unfortunately detracted from its more cinematic qualities: a literate script, fine acting and some lavish spectacles. Mankiewicz, who replaced Rouben Mamoulian as director, intended that the film should be released in two parts, with a total running-time of about six hours. Darryl F. Zanuck, then head of Twentieth Century Fox, insisted the film be reduced to 246 minutes, and it was further cut to 184 minutes for general release. For this video release CBS/Fox have utilised the four-hour version, on two tapes.

In spite of the available resources the battle scenes are curiously disappointing. The battles of Pharsalia (48 BC) and Philippi (42 BC) are seen only in their aftermath: it seems likely that combat footage was among that shot for the six-hour version but never finally used. The 'Battle of the Moon Gate' was only a small incident in the Alexandrian War (47 BC). However, a night attack on the city walls by the Egyptian army is efficiently routed by a Roman testudo. The climactic sea-battle of Actium (31 BC) features some impressive full-scale replicas of period warships amongst the model-work, but the brief scenes of hand-to-hand combat fail to generate much excitement. Nonetheless, the film is in many ways misleading, and it is to be hoped that it will eventually be seen in the form that Mankiewicz originally intended.

Those with a soft spot for 'Hollywood Biblical' will doubtless also enjoy Cecil B. DeMille's mammoth spectacle *The Ten Commandments* (1956). The outstanding cast included Charlton Heston as Moses, Yul Brynner as Pharaoh Rameses II and John Derek as Joshua. Most of the location work was appropriately filmed in Egypt and Sinai. The Egyptian army provided thousands

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of extras, in particular the Cavalry Corps, who trained hundreds of chariotteers for the Exodus sequence and the parting of the Red Sea. Although it is easy to belittle the script and acting styles in a religious epic made nearly 35 years ago, DeMille's last film as director was an unqualified triumph in terms of spectacle and production design.

Stephen J. Greenhill

16th century Japanese cavalry in one of the battle scenes from Kurosawa's *Kagemusha*. The director extended a genuine historical practice artistically by costing large numbers of extras representing whole armies in single colours; this contributed to the impressionistic appeal of the spectacular final battle. (CBS/Fox)



REVIEWS

'American Indian Warrior Chiefs' by Jason Hook, colour plates by Richard Hook; Firebird Books; (published simultaneously in four individual paperback volumes); 192 pp.; 16 maps; 16 colour plates; line drawings and photographs throughout; chronology, biblio; £14.50.

The father and son combination of Jason and Richard Hook is fast becoming synonymous with clear and readable factual accounts of the Indians of North America and their history. In this latest book, Jason Hook has researched through many sources to achieve an accurate and concise story of the life and times of four great Indians; Tecumseh, 1768-1813, the great visionary leader of the Shawnee; Crazy Horse, 1841-1877, one of the finest warriors of the Sioux; Chief Joseph, 1801-1904, oratorian and leader of the Nez Perce; and Geronimino, 1829-1909, fighting man of the Apaches. Richard Hook's illustrations, which are beautifully presented, can be relied upon for authenticity of dress and accoutrements. The text is interspersed with photographs of contemporaries of those discussed and artifacts similar to those in use at the time, as well as line drawings which unfortunately did not reproduce too well. Each chapter has a map of the area discussing battles and other highlights in the lives of these great men. There is also a small map showing the 'ruthless area' in question, a great help to those unfamiliar with the geography of the United States. Each section has a chronology covering the lifetime of each figure, as well as a bibliography. The whole format makes a compact, well-presented and very readable factual account of these four great leaders.

1MW

ile weapon. Six editions of the book were published, and this reprint has been made from Mr Robert's own copy of the final 1661 edition. This includes a 40-page treatise entitled 'Some Brief Instructions for the Exercising of the Cavalry or Horse-Tropes', thus rendering this edition a complete guide to military practice of the period. The 1661 edition also incorporates 'Mars his Triumph', a 28-page pamphlet describing a military entertainment devised by Barriffe and performed on 18 October 1638 outside the Merchant-Taylors Hall in London.

This book is a flagship for Partisan Press and the care and financial commitment which has gone into the project is evident. The quality of reproduction is excellent, making the book easy to read and understand as well as a collectors' item in treasure.

JPT

'The Hitler Youth' by David Littlejohn & Harry Hirds; Agincourt Publishers, USA; ISBN 0-934870-21-7; 377pp, 944 b/w illust., 71 col. illust.; £27.95

This book is a departure from David Littlejohn's usual publisher — Roger Bender — the Hitler Youth book having been published by Jill Halscon of Agincourt Publishers. In some ways this is a pity as the treatment does not seem to the reviewer to be as professional as Bender gives to his titles. However, presentation apart, the contents are well up to Mr. Littlejohn's usual high standard. A vast amount of information is contained on a wide variety of subjects that have been brought together under the heading of 'Hitler Youth'. These include Factory Cell Organization, Students' Union, Leadership,

Zionist, Students' Union, Etceterism, Shooting Courses, Aeronautical Training Schools (in fact schools of all types) Youth Camps, official visits to foreign countries, Agricultural Service, War Work and many such others, all of which contain a wealth of information on uniforms, badges, rank insignia, head-dress, sirle-armrs, flags, banners and the like. Coverage is not restricted to boys and youths, but extends to the girls of the BDM; and includes much

material on the youth movements in countries occupied by the Germans which were influenced by German National Socialist ideals.

The artwork is not up to the standard achieved in the Bendr books, but nevertheless the book imparts a lot of information, a great deal of which is new, and will be of considerable interest. Highly recommended. **BLD**

additional information relating to
columns 1, 2 & 3 in this same series.
Highly recommended. BLD

BLD

Foreign Legions of the Third Reich, Vol. 4: Poland, the Ukraine, Bulgaria, Rouravia, Free India, Estonia, Latvia, Lithuania, Finland and Russia by David Littlejohn; R. James Bender Publishing, California ISBN 0-912138-36-X; 380pp, 961 b/w illust., 107 col. illust.; £19.95 This is the fourth and final volume in the Littlejohn-Bender series of books on the 'strange legions' of Hitler's forces, and in some ways it is the most interesting, including as it does the Eastern Volunteers. The sheer volume of illustrations together with the wealth of information makes this book excellent value. However, in no justice to the whole of this subject it is essential to have all four volumes in this series on your book shelves. (Copies are available from: A. A. Jolustina, Landmark Booksellers, and Motorbooks of St. Martin's Court, London, among others.)

It is hard to imagine anything that has not been included in the coverage, from the history of the formations and units raised in the various countries, through the uniforms, insignia, tank bridges, national arm shields, mirlots, decorations, aravats, flags, standards, drappers, armbands, aircraft markings, 'vings' cuff titles, rags and insignia, in such items as rings, vrhicle signs, pay-links and citations. As is the practice with 'Bender' books there is an addendum section at the rear of the book that includes corrections and

'Salerno Remembered' by Geoffrey Curtis; published by the Queen's Royal Surrey Regimental Association, and available through the Regimental Museum, Clandon House, West Clandon, near Guildford, Surrey; 172 pp, 30 h/w illus., 9 maps; £8.50

The Allied landings at Salerno in September 1943 were the first major assault in Occupied Europe; and saw a unique combination of six Territorial Army battalions of the Queen's Royal Regiment — 169 Queen's Brigade in 56 London Division in the assault, and 131 Queen's Brigade in 7th Armoured Division which broke out of the beachhead and with its sister brigades led the advance to the River Volturno and Naples.

Drawing on interviews, recollections and official and regimental histories, *Salford Rinnibberd* gives a soldier's perspective of men in action. Anyone familiar with the British infantry battalion structure, and particularly with Territorial soldiers, will find the book fascinating and an interesting reading. However, it was not grim all the time, and the vigour and humour of Cuckney soldiers will make the reader chuckle over 40 years later.

Geoffrey Cruttis was a platoon commander at Salerno, his return from the Army as a brigadier; and the book has a fund of useful observations about tactics and leadership. In interviews and recollections the 'old and bold' look back with an affectionate but critical eye on themselves at 20, and comment on tank/infantry co-operation, artillery fire, and leading men in battle.

Salem Reminiscences is privately published and available through the Regimental Museum. For an

informed, intelligent and absorbing account of infantry in action and of the fighting at Salerno it is well worth the effort of tracking down a copy.

EWWF

'Assault on Germany: The Battle for Geilenkirchen' by Ken Ford; David & Charles; 192 pp; 38 photos & maps; appendices, index; £9.95

Campaign histories and memoirs of World War II are plentiful; books of this particular type are less so, and valuable. The November 1944 battle for the Geilenkirchen salient is a subject thoroughly representative of a certain kind of infantry soldiering; and was of a scope — basically, one British and one US Army division with supporting arms — which can be covered in absorbing detail in a book of this size. There is an opportunity not merely to recount a diary of events, but to pause for eyewitness quotes, explanations, and personal impressions of circumstances, units, and individuals. This opportunity is seized by Mr. Ford, who writes clearly and with understanding. Of particular interest to those with connections with 43rd Wessex Division or the 84th 'Railsplitters', this is a valuable study in close-up of the kind of fighting which characterised the European front in winter 1944-45. Recommended.

MKW

'The All Americans — The 82nd Airborne' by Leroy Thompson; David & Charles; 192 pp; 113 b/w & col. photo; index; hardbound; £12.95

This book is an ambitious project chronicling the history of the 82nd Airborne Division, the US Army's only airborne formation in continuous existence since 1942. Beginning with the division's origins in the First World War as a standard infantry division, the book then jumps to its reactivation as an airborne division in 1942. The division's history is well handled throughout its many Second World War operations; the changes in doctrine and organization of the 1950s and '60s; its use as a fire brigade in the Dominican Republic, Vietnam, and Grenada; and its world-wide deployment on exercises in the 1970s and '80s. Special in-depth coverage of the division's Second World War operations and its place in the overall strategy is presented. Besides telling the story of the 'All Americans', the book is a study of the US Army's evaluation of airborne forces and their use in power projection. It also details the division's many reorganizations and subordinate units, the training the troops receive, and airborne traditions. The only fault that can be found is the author's occasional slight misuse of military terminology, though this does not detract

from the story to any great extent.

Well illustrated with black-and-white and colour photos representing the division's entire history and spectrum of operations, it should prove to be of value to figure modellers interested in any era of the US Army. Given today's glut of airborne books, it is a pleasant surprise to find that many of these high-quality photos have not previously been published. They include a wide range of colour insignia collections; however, Thompson still persists in using replicas of unofficial insignia in his photos, thus adding further to the confusion of collectors.

GLR

'Hamburger Hill, May 11-20, 1969' by Samuel Zaffiri; Arms and Armour Press; 304 pp; 20 b/w photos, 12 maps; £10.95

Samuel Zaffiri was a minor man with 1st Infantry when, recovering in hospital in Japan during the Vietnam War, he talked to survivors of the 101st Airborne who had fought in the battle for Ap Bia Mountain (Hill 937) — 'Hamburger Hill'. His account is a good mix of first hand recollection, tactics, and the political and strategic background. Like many American authors he has a good ear for dialogue; and the book has a convincing slanting of signals small talk, and the nervous chat between young men faced with violent death.

At the time when Hamburger Hill was 'hot news' there was controversy in the United States about the tactics employed, and the reason for evacuating the hill after it had been captured. The author explains the thinking behind the operation, and asks the veterans what they think about the action. Senator Edward Kennedy called the operation 'senseless' and 'irresponsible'; and 20 years later the book allows soldiers and officers to express their views. Lt. Col. Weldon Honeycutt, the driving force behind the assault, remains true to his convictions: 'My tactics at Hamburger Hill were aggressive. That's the way you fight a war. How much ground are you gonna take being non-aggressive? How many enemy are you going to kill sitting around and waiting for him? Nobody ever won a war trying to avoid combat'.

The large number of maps in the book are essential if the reader is to follow the action as GIs move up jungle-cluttered gullies towards the summit of the hill. As with many jungle operations, the chances of survival for a platoon often hang on the alertness of the point man leading the platoon through the gullies and up the mountain. Zaffiri records the tension and fear of fighting a resourceful enemy who had prepared for combat in this remote jungle area.

Texas 77018-4023; b/w photos; p/b; £25.00 per volume plus postage

From 1966 through 1970 the 5th Special Forces Group, headquartered in Nha Trang, Vietnam, published a monthly magazine for distribution to its many far-flung operational detachments. In many ways the magazine was typical of in-house military unit publications. It reported promotions, the award of decorations, changes in command, news items of interest to the troops, a word from the commander, cartoons, and military developments. The magazine was unique, however, in telling the story of the A- and B-teams, living and fighting with their indigenous Civilian Irregular Defense Groups in remote and primitive camps scattered throughout Vietnam's jungles, plains, mountains, and swamps. It told of the exploits of the Mobile Strike Forces (MIKE Forces), special reconnaissance projects, SF-run training schools, and Vietnamese Special Forces (LLDB). The Green Beret Magazine chronicled the history of the Special Forces in Vietnam, the men, the units, and the indigenous soldiers who fought with them. They are a unique trove of historical articles and stories of valor, offering information that cannot be found elsewhere. Every article is extensively supported by photographs taken on the spot by the participants and the magazine's assigned reporters. Those interested in Vietnam militaria will be treated to scores of photographs showing the Special Forces in action along side the CIDG and LLDB. Many of these photos reveal field uniforms and equipment worn on combat operations, insignia, weapons, and camp fortifications.

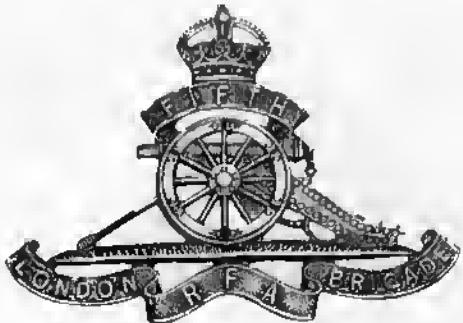
No complete set of the five years of publication of the Green Beret existed intact until a small group of SF veterans spent almost two years contacting individuals across the country in search of the many missing issues. Their efforts were rewarded in the first complete set to be assembled since the 5th SF Group departed Vietnam 18 years ago. Each year's issues are now being reprinted in annual volumes beginning with Volume V (1970) and working back toward Volume I (1966). Reprinted on high quality paper, the photos have actually been reproduced to a higher quality than the originals due to special lighting techniques. Each volume is bound in a soft-back cover with full colour, reduced-size reproductions of each issue's original covers. The volumes are of different lengths, but typical is Volume V with 312 pages of history, almost 400 photos and a detailed table of contents added by the new publisher. Volumes III, IV and V are now available, and I and II were due in July 1990. Volume I will contain a 10,000-entry index listing every individual, unit, team, camp, and event in all five volumes.

Highly recommended for any reader interested in the US Special Forces in Vietnam.

GLR

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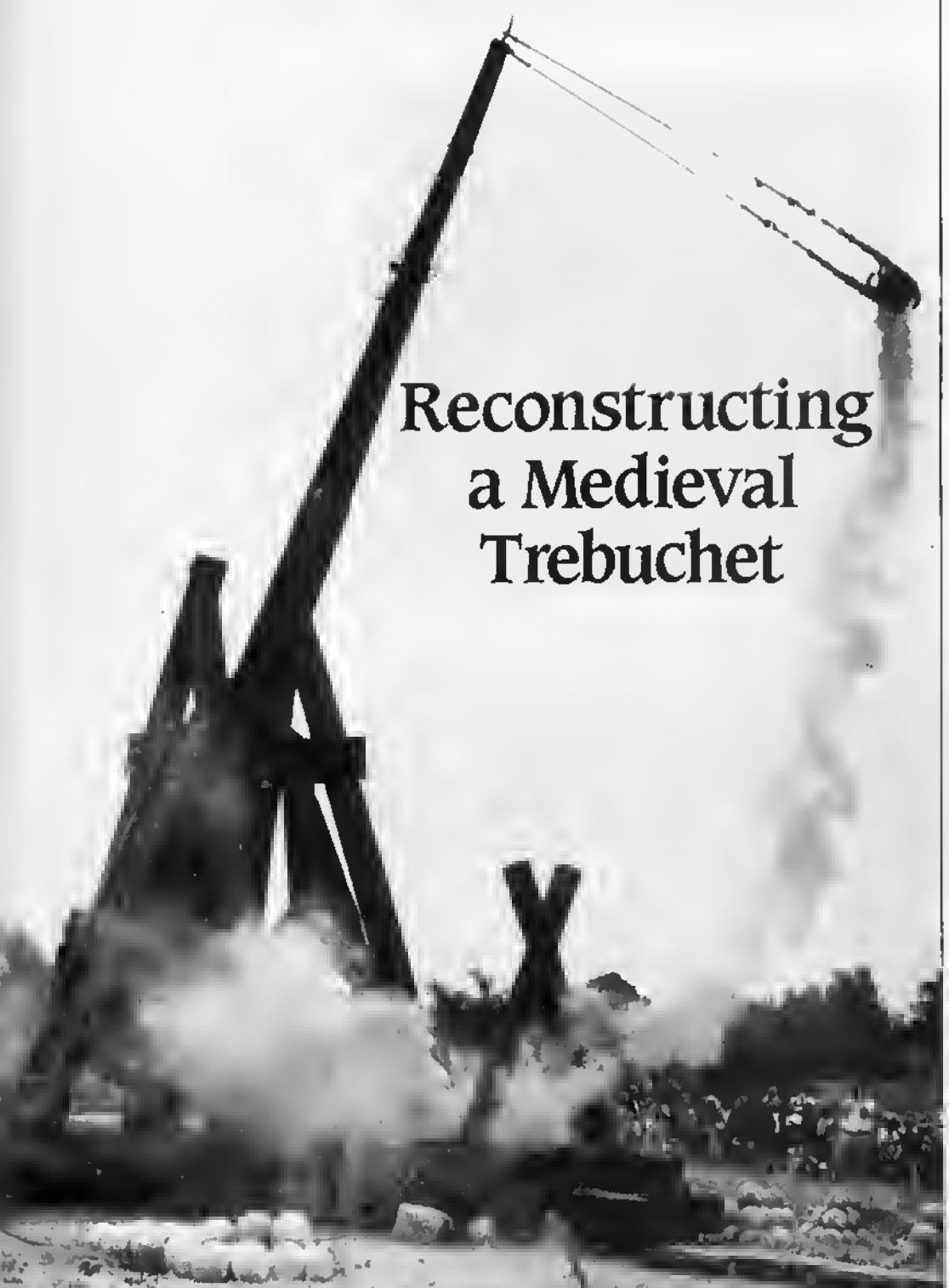
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With the majestic swing of its arm aeruated by using a smoking projectile, the reconstructed siege-engine is tested on the shore of the sound dividing Falster and Lolland islands in southern Denmark. (Alders Knudsen)

Reconstructing a Medieval Trebuchet

PETER VEMMING HANSEN
Translated by BOB RAYCE

In the summer of 1989 the Museum of Falsters Minder in southern Denmark built a full-scale working reconstruction of a medieval trebuchet siege-engine. It took more than a year of study and preparation before the 12-ton machine could be shot for the first time, over a small waterway separating the islands of Lolland and Falster. The results have been fascinating.

WAR MACHINES

The art of building war machines can be traced back over more than 20 centuries. We are familiar with many

variants, which worked on different principles, but they all had the same purpose: to throw a heavy projectile over a long distance. The

machines can be roughly divided into three categories: the ballista, the catapult and the trebuchet. The first category fired arrows, the others threw stones or other projectiles⁽¹⁾.

The oldest known machines are the ballista and the catapult, which both date back to antiquity, but the trebuchet is only recorded in the period from 1050 to 1535. While the catapult and ballista were spring driven, the trebuchet used the leverage principle: a heavy weight was placed on one end of a lever (which was pivoted to a solid

base), and a sling containing the projectile on the other end. The three types of machine were probably used together well into the 15th century, along with the newly introduced cannon.

The trebuchet was the heavy artillery of medieval warfare. It was basically a siege-engine that could throw projectiles at or over the walls of a city or castle, although it could also be used against shipping. These were heavy, complicated machines, which needed a strong timber frame if they were to work properly. The counterweight could weigh up to ten tons, the container being filled with sand, stone or lead, while the ammunition could weigh up to 300kg (660lb). This ammunition ranged from the usual large stones to include beehives, small stones baked in a clay ball which exploded on impact, barrels of oil which could be ignited, dead animals to spread disease and, finally, enemies or captured spies, dead or alive. Apparently you knew when they had landed because the screaming stopped.

The trebuchets varied in size from small ones which could be placed on city walls, to larger versions which could breach those walls. During a siege the trebuchets were normally built on the spot, although principalities and large towns often had a special building for the machines, under the control of the 'Magister Tormentorum', the Master of the Catapults.

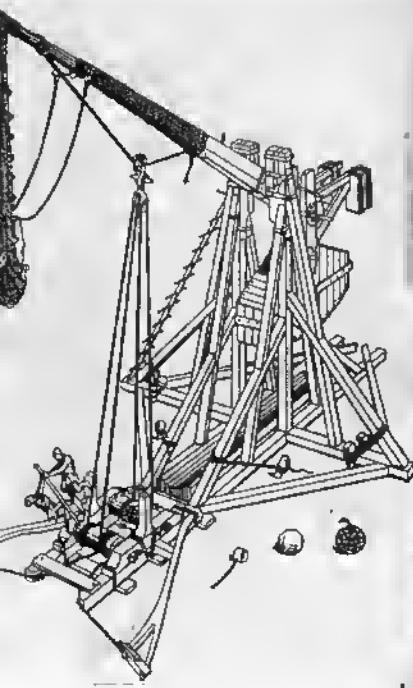
Trebuchets were used throughout most of Europe, the Mediterranean world and in Asia. The trebuchet reached Scandinavia at the beginning of the 11th century, where it was called by a variety of names including *blida*, *manga*, *tormentum* and *valslovgva*. The machines, or the knowledge of how to build them, probably reached

Right:

The scale obviously distorted in accordance with artistic convention, a trebuchet is clearly depicted in this 15th century MS illustration of a siege.

Below:

A secondary source which has been much copied is this drawing made in 1854 by the French historian Viollet-le-Duc.



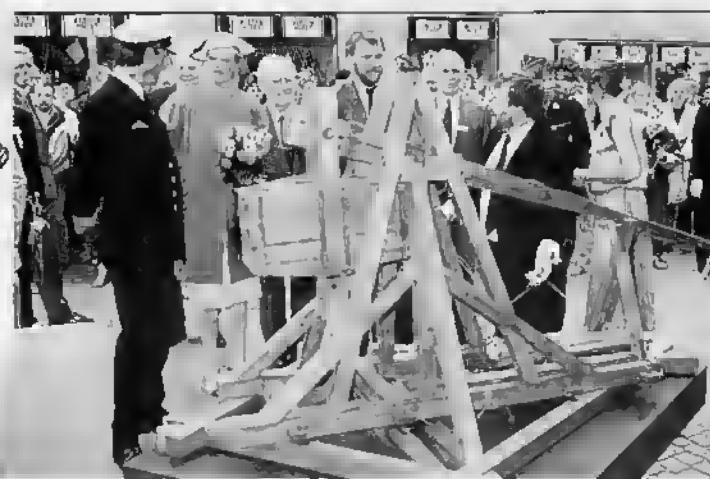
Centre:

Much of the initial work was naturally carried out with scale models. Here one is demonstrated to HM Queen Margrethe II of Denmark and Prince Henrik. (Anders Knudsen)

the area from southern Europe through northern Germany.

Ammunition

No trebuchet survives today. In about 1890 one was found under a church in East Prussia but it was immediately destroyed. The stones for them, however, are sometimes found. These are typically smooth, spherical and of an identical size — 17-20in. diameter. Occasionally one reads of stones weighing up to 1400kg (3086lb.), but the normal weight was between 40kg and 290kg (88lb. and 640lb.). A healthy degree of scepticism is advisable here, since experiments have shown that a rock weighing 1000kg (2204lb. — nearly a ton) would need a counter-weight of 27 tons just to stop the missile landing on the machine itself.



Labour and costs

In John E. Morris's book on the Welsh wars of Edward I, published in 1901 (see source notes), there is a marvellous description of how an 'engine', which must be a trebuchet, was used at the siege of Emlyn and Dryslwyn castles in 1288-89:

'While Cornwall's English army pushed on with the siege of Dryslwyn, Haverings' mechanics and sappers from the northern castles were set to work and an engine was brought up. The bill for fitting it up, and buying hides, timber, rope and lead came to £14. Twenty quarrymen and four carters made and brought up the stone bullets.'

'The engine which had done so much damage at Dryslwyn was brought up by an escort of 20 horses and 463 foot. Within five days it was hauled to Cardigan by way of St. Clears and Cilgeran. 40

oxen and four four-wheeled wains being used. At Cardigan it was taken over to the right bank of the Teify and repaired, and thence hauled by 60 oxen into the camp before Emlyn by January 10. The casting, with the hire and keep of the oxen, cost 45s. The wages of the blacksmith and costs of materials used in the repair, including 4s 6d paid for pig's fat for grease, came to 70s. Men were employed to pick up 480 stones on the beach below Cardigan and transport the same by boat to Llechryd on the river, and thence to carry them on 120 packhorses to the camp, thus earning 48s.

'The whole bill for the engine and siegework came to over £18. As not a single man was missing out of the paid portion of the army, it would seem that the surrender was peaceable, and probably the engine and the 480 great stones upset the ten-

acity of the defenders.'

Models and full-scale copies

Exactly how a trebuchet works has been something of an enigma. Many attempts have been made to find out by building working models. Napoleon III of France and his officers tried to build a full-scale trebuchet, but the materials used were too weak and the thing broke after just a few shots. Interestingly, the first shot achieved a range of minus 70 metres — which was bad news for Napoleon, but good news for future experimenters, since they now knew that the machine could shoot backwards.

SOURCES AND CONSTRUCTION PRINCIPLES

Before a reconstruction can be attempted one has to consult the sources and, since a working trebuchet has never been found, one is left with contemporary reports and pictures. The quality of medieval sources is very variable, often pure fantasy or else based on second- or third-hand sources. Pictures display equally variable attempts to depict reality.

The basic principle of a trebuchet is simple enough, and one could easily be constructed by a modern engineer which would work perfectly well. The problems arise if you want to build one in an historically correct manner, using the same tools, technology and materials as those of the Middle Ages. The original machines were developed and tested on thousands of battlefields throughout Europe and Asia, giving a depth of knowledge and experience that is missing today. The museum of Fals-ters Minder lacked that experience; but built a series of models in 1:10 and 1:5 scale. By comparing the test results with the old descriptions and pictures, slow progress was made.

The first move in construction is to place a revolving axle in a set position at a pre-determined height above the ground. The axle, upon

which the trebuchet's arm will revolve, is exposed to considerable lateral and vertical stresses, so great demands are made on the machine's base. First of all a heavy frame must be made, which can be chocked up to the level. On this frame two towers, which will bear the axle, arm and counterweight, are placed, the towers being stabilised laterally with heavy timbers. All this gives a strong and stable framework, capable of withstanding the forces released when the arm with its tons of ballast is suddenly swung.

From sources and from experiments, several factors emerge which will determine how successful the trebuchet will prove: the exact angle of the bend in the iron tip from which the sling is released; the weight of the projectile; the weight of the counterweight; the length of the arm from the tip to the axle and from the axle to the counterweight; and the length of the sling, are all important.

These five points must be balanced against each other. For example, tests show that the greater the weight of the projectile, the earlier the sling will open. On the other hand a very light projectile will leave the sling very late, and will slam into the ground right in front of the trebuchet. Obviously, the weight of the projectile must be

balanced with the weight of the counterweight. The angle of bend in the iron tip from which the sling is released is another crucial factor: too shallow a bend means that a heavy projectile might release too early, with dire results for machine and crew. The length of the sling is important as well: as a rule a short sling gives a short shot and vice versa, but there are obvious limitations as to the length of the sling.

The craftsmen's contribution

Armed with all this knowledge, the museum suddenly realised that it did not know of anyone who could build a full-size machine. The work combined the skills of half-timbering with the technology of wind- and watermills. The answer lay with millwrights, since their skills pre-date trebuchets. They soon suggested changes to the dimensions of timbers, the types of wood and the

fitting of supporting equipment.

Bringing in these old craftsmen added an exciting dimension for the museum scholars behind their desks. We suddenly saw our mathematical and technological research overtaken by know-how and experience. The craftsmen's changes improved the quality of construction, and let us go back to the medieval pictures and descriptions to discover details which we had not previously noticed or understood.

The construction process

In modern reconstruction projects the available funds are seldom equal to the ambition. It would be too expensive to do all the processes using the original tools and so on, so some compromises have to be made. For example, the museum had the timbers cut at a modern sawmill. About 40 cubic metres of trees were felled for the trebuchet. The wood was

transported to the millwright, who started fitting the pieces together.

At the same time the museum faced up to other problems. First of all we had to find a place to test the machine, bearing in mind that Napoleon III's experiment showed that we had to have a clear area not just in front but behind as well. The machine was placed on the shore of the sound between Falster and Lolland islands, allowing shots to go forward into the water or backwards into marshland. Security was another problem. We marked out a restricted area both on land and at sea and installed observation posts along the sound. A ship and a command post had to be linked by radio, and the naval authorities had to be notified six weeks in advance of every firing.

The trebuchet was built during a three-week period in the middle of the summer. The construction process was watched, at one time or another, by between 15,000 and 20,000 visitors to the museum, all of whom derived great pleasure from seeing the old craftsmen exercising their skills.

continued on page 14

Left:

A great deal of useful advice was contributed by the craftsmen engaged to make the full-size reconstruction, notably the millwrights, who are heirs to a centuries-old craft demanding high skill in judging by eye every aspect of heavy timber constructions. Here a millwright works on parts for the trebuchet.



Above:

The massive composite ash-wood throwing arm almost ready to be lifted into place.

Left:

The completed trebuchet is tested without ballast in the counterweight housing, to check that all moving parts function correctly.

continued from page 11

Right centre:

Under the curious gaze of camera crews, the trebuchet is loaded. The throwing arm is pulled back by manpower, using a block-and-tackle rig.

Right:

This high-angle photo taken during trials with a smoking projectile clearly shows the path followed by the loaded sling during the first stage of its swing backwards and upwards. (Anders Knudsen)

TRIAL RESULTS

The machine was tested progressively, at first without any ballast on the end of the throwing arm. The heavy arm was pulled down and then released, and then weight was gradually added to the counterweight. The first shot with ballast was marginally impressive. The great throwing arm was released and drove upwards with unstoppable force, launching the projectile with a strange singing sound. After the release the whole machine slowly settled down again with an immense creaking and groaning.

After these opening tests more ballast was added to the counterweight. At first a one-ton counterweight swung a 15kg (33lb.) concrete ball. Upon release, the sling and projectile moved forward and upward in a beautiful curve around the accelerating throwing arm. The projectile was released at 70 degrees and accelerated away in a curved trajectory to fall in the water 120m (393ft.) from the trebuchet. These tests continued, with more and more ballast being added to the counterweight. So far the machine has been fired 72 times with a ballast of up to 2000kg (4409lb.). The trebuchet was designed for weights of up to 4000kg (8818lb.), so it has not yet been tested to its limits, but already the trials have given us valuable data and experience. The longest shot so far was with a 15kg (33lb.) concrete ball which flew 180 metres (590ft.), and the heaviest projectile weighed 47kg (103lb.) and flew 100 metres (328ft.) with a ballast of 2000kg (4409lb.).

The trebuchet has proved a remarkable machine, being





A superimposition photograph of six moments during the throwing sequence, and a smoking projectile, show the relative positions of the arm and sling, and the curved trajectory of the ball. With a 15kg (33lb.) concrete ball the greatest range yet achieved is 180m (590ft.); accuracy is remarkable, all projectiles in a single series of shots falling within a 6m (19.6ft.) square. As yet trials have not been carried out with beehives, burning oil, decomposing corpses, or captured spies... (Anders Kiudsen)

very reliable and working with amazing precision. All the projectiles shot during a single series of trials with a constant ballast and weight of projectile landed within a square measuring 6m by 6m (19ft.), which is a fine result even compared to a modern mortar. Of course the spread of shot increases with the length of shot, but the precision is still remarkable. The museum trebuchet is stationary and incapable of lateral movement, the only variable being the length of shot, which can be increased by adding ballast. To function with optimum efficiency, however, the original machines must have had some form of lateral movement. If this was the case, such a precise weapon would be able to fire on every corner of a besieged castle with devastating accuracy.

Modern replication work

Throughout the last ten or 15 years experimental research on prehistoric and historic finds and artefacts has become much more common in the museums of Scandinavia. When working with such archaeology it is important to remember the words of one of the pioneers in this field, Don E. Crabtree: 'Both to train manual skills and to investigate the archaeological and historical context, replication in a true sense of the word must rest on a feedback system between these two aspects.' Whether the Falsters Minder Museum has succeeded in achieving this goal with the reconstruction of the trebuchet is for others to judge. However, we believe that we have made what might be called 'a high possibility statement'; and to get

closer than that will take a good deal of additional experimental work. **[1]**

Sources and further reading:

D.J.Cuthart King, 'The trebuchet and other siege engines', *Chateau Gaillard IX-X* (1982)
John E.Morris, *The Welsh Wars of Edward I* (Oxford, 1901)
Peter Vennning Hansen, 'Bliden — en rekonstruktionsforsøg', *Lolland-Falster Historisk Samfunds Årbog*, (1989)

Notes:

(1) See 'M' Nos. 2 and 4, 'Roman Artillery' by Dr. Paul Flöbler.

The publication of detailed plans and a technical specification of the reconstructed Trebuchet is not possible at the time of going to press. However, readers with a serious interest in the detailed technicalities may contact Dr. Hansen at: Falsters Minder, Museet i Czarens Hus, Faerges traede, 4800 Nykøbing F., Denmark. Some basic figures are as follows:

Main frame 8.5m long, 7m wide (27.8ft. x 22.9ft.), made of 26cm square beech timbers (10 1/4in.). Height of 'towers' above main frame 4.8m (15.7ft.).

Throwing arm 6.5m (21.3ft.) long, of which 5.5m (18ft.) behind pivot; ash-wood timbers.

String length Various, to a maximum of 4.8m (15.7ft.) Tip angle: The iron tip was tested with six different angles of bend conforming with different ballast and projectile weights.



DIEN BIEN PHU (4) Helmets, Boots, Webbing Equipment

DENIS LASSUS

In this final part of our study of the dress and equipment worn by French troops at Dien Bien Phu, 1954, we describe the combat headgear, personal equipment and footwear of both airborne and non-airborne units. As with the clothing ('M1' Nos. 20 and 23), both US and British equipment was used alongside French equivalents, some units having a preponderance of one or the other. Generally the soldiers of the garrison, operating close to their rear base, carried only light combat equipment for the sake of agility.

HELMETS

Most non-airborne units wore the US M1 helmet despite the widespread issue of the French mle. 1951. The M1 shell was generally termed the 'heavy helmet' or *bombe de casque*, while the liner of resin-impregnated composite material was termed the *sous-casque* or 'light helmet'.

The French mle. 1951 was a poor copy of the American type. The shape of the shell and liner was more rounded and less well adapted to the shape of the head. The front brim was shorter, the cutaway shaping at the sides less pronounced, and the rear brim large and annoyingly cumbersome. On the first version the attachments for the chin straps were rigid, and of a simple 'U-bracket' shape. From 1953 they were made movable as on the 1943 model of the US M1. (From 1956 they reverted to being fixed rigidly, as on the US M1 1941 model.) The chin straps themselves were similar to those of the US original, of light webbing with khaki-painted metal tips; a rivet eventually replaced the sewn item which originally secured the buckle. The helmet was always painted olive drab, 'Army' or 'NATO' green only appearing in the 1960s.

Paratroopers frequently

used the US M1, but preferred 'junior' versions, whether standard or locally modified. The true M1C paratroop helmet was rarely seen. Most 'heavy helmets' used by the paras were regular US M1s, lacking the special chin straps with press-studs to fix them to the liner. However, a liner with a cloth chin harness was frequently married to the standard steel shell. (The leather chin harness for the paratrooper liner was rarely seen, and even then the straps were usually cut down to make a better fit.)

Because of the shortage of the M1C, the Commissariat of the Expeditionary Corps modified standard US liners by adding a cloth chin harness based on that of the M1C. In place of a pronged buckle the French preferred two double-rings, a standard fitting on some French equipment items, which were easier to adjust and unfasten. The material used for this cloth chin harness was too flimsy, causing the loss of many helmets during parachute jumps. Paratroopers often fixed a bootlace or length of para-cord from a helmet bracket to a fixture on the parachute harness; when not in use this was folded up under the elastic of the camouflage net.



There was a paratroop version of the French mle. 1951 from the start, but it seems only to have been issued in Indochina fairly late in the war; it was used during the jumps over Dien Bien Phu, however. The shell was the normal 'all arms' type, and the liner had a cloth chin harness modelled on that of the M1C but with small differences of construction and buckle.

Most helmets were covered with camouflage netting, usually of the US small-mesh type. This was held in place by an elastic either sewn to the back of the net or slipped over it loose—elastics were either standard US issue or locally cut from tyre inner tubes. Field dressings, cigarette packs, etc., were often slipped into the elastics. The French-made net was also used—this was a copy of the British type,

Dien Bien Phu, early 1954: a cinematographer of the Service Cinématographique des Armées photographed by a colleague—note Press flash on pocket of Dragoon smock. This helmet is an exception to the general description given in the text. The shell is an M1C, and the fastening of its chin strap to the inner liner can clearly be seen—implying that the liner, too, must be an original US paratroop model, despite the addition of a French cloth chin harness. (All monochrome photos ECMA)

without noticeable differences.

The majority of the fighting troops in the beleaguered camp wore the helmets described, but other personnel at DBP did use some alternatives. The crews of the Chaffee tanks of 1st RCC used examples of the US 'tanker's helmet'; and also of the French mle. 1935 motorised troops' helmet, with its characteristic leather brow pad but without insignia. This was also worn by Air Force



ground staff, in a blue finish and with Air Force frontal insignia. These airmen, trapped inside DBP by the destruction of the airstrip, fought on as infantry; and in some photos it is difficult to distinguish between them and tank crewmen. The Air Force men also wore examples of the mle.1945 helmet (called the 'Joan of Arc', from its medieval shape) in blue finish, without insignia.

WEBBING EQUIPMENT

A truly comprehensive study of equipment used at DBP is impossible, for obvious reasons: the diversity of sources of supply, and the use of locally manufactured items. Depending upon the type of unit — from local partisans, to paratroopers — the equipment ranged from the oldest to the newest models, with each unit making changes

according to its own ideas and resourcefulness. Absolute classifications are thus precluded.

Belts

The US pistol belt, widely used throughout the Expeditionary Corps for the whole of the war, gave birth to the French "TAP" (airborne troops) type in 1950. This had only two rows of eyelets, instead of the US model's three rows. The central fixing



(A) US M1 helmet, the liner with a French-made cloth chin harness. US issue camouflage netting with elastic seen at the rear.

(B) US M1 helmet with liner for MIC paratrooper version; the leather chin harness has been cut for a better fit, as was common in French use.

(C) French mle.1951 helmet for airborne troops. The steel shell is the 'all arms' type; the liner has a web chin harness of American style.

(D) French mle.1951 'all arms' helmet and liner, with French issue netting.

(E) Top left: 'Patangas' made by Palladium, as issued in the later part of the Indochina War and used in Algeria. Top right: 'Patangas' made by Wissant, probably a private purchase type. Below left: Mle.1917 ankle boots. Below right: French mle.1945 gaiters, above French mle.1951 gaiters.

(F) Top left: Mle.1950 jump-boots, with serrated soles. Top right: Mle.1950/53 jump-boots, of the version with a false sole pattern on the soles. Below left: US M1943 double-buckle boots, called 'rangers' in French use. Below right: Mle.1950/53 jump-boots, the soles sole displaying the standard cloth pattern. All jump-boots were issued in natural leather colour, the boots in black finish depending upon the type of polish or grease applied later.

Above:

4 March 1954. Gen. Naveau presents decorations. There is no indication of the units to which these officers and men belong. Of ten in the front rank, five wear the French 'all arms' helmet mle.1951 (see extreme right); two, the US M1 helmet liner; and three, the complete M1 assembly. Most helmets have the US netting. All wear the TAP mle.1950 web belt and the mle.1947 combat fatigues with 'lightened jacket' — see details,

'MF' No. 23. The varied lots include mle.1917 and 1945 ankle-boots with mle.1945 gaiters, patangas with US gaiters, and locally-made 'rangers'.

Left:

Three Air Force personnel wear two US M1 helmets (nos. 1 and 4 from left); one mle.1935 French motorised troops' helmet (centre); and two mle.1945 'Joan of Arc' helmets (nos. 2 and 5) — a hardly drugged arm, of which this is one of the few known from live photos.



A



D



B



E



C





Shortly before Dien Bien Phu, a para of the 8^e CGP photographed during Operation 'Hirondelle' at Lang Son displays to perfection the side details of the mle 1950 pump-action. Both sides of him can be seen a musette d'allègement type TAP mle.1950; and on his back this light machine gunner has the 'type TAP' webbing pouch for five FM12/29 magazines.

hook at the right hand end of the US belt was replaced by two hooks, corresponding to the two rows of eyelets. The buckle was a black-painted iron copy of that from the British M1937 webbing belt; and was flanked by two half-round section sliders only 5mm wide.

In theory the manufacturing specification was the same as for the US belt, and the cost of producing the webbing items was in fact higher than that of the old leather equipment still generally used by the bulk of the French Army. Nevertheless, from its first appearance in the front lines the belt attracted widespread criticism from the troops for its general flimsiness of construction and fittings. In 1953 a new 'RAPCO' type quick release buckle was introduced, and soon replaced the

British type.

This belt was widely issued for the first time to the paratroop units who reinforced DBP in spring 1954, although a photo of a légionnaire taken during Operation 'Castor' on 22 November 1953 also shows one. During the battle of Dien Bien Phu this belt and other nominally 'TAP' equipment items were also issued to infantry units.

The British M1937 belt also continued to be issued, especially to indigenous units such as the Thai battalions. This was also true of French leather belts with two-prong buckles, both the 55mm wide mle.1914 and the 45mm mle.1945.

Braces/Suspenders

Suspenders in general corresponded to the type of belt worn: e.g. US M1936, British M1937, French 'TAP' mle.1950, and old French leather braces only slightly modified since the end of the 19th century. The 'TAP' braces were based upon the US type, but are easily recognised by the two rectangular buckles on the front of the shoulders; these allowed the attachment of the large sprung-hook fittings of some

eventual items of airborne equipment.

Packs

The British M1937 'large pack' and US M1936 musette were both widely used. So were the French 'all arms' musette mle.1950; the French 'TAP' musettes mle.1950 and 1950/51; the small haversack inherited from the French field equipment of the 19th century; and the so-called 'bergam' rucksack mles.1945 and 1951.

The *musette tous armes* mle.1950 was a bad compromise between a knapsack and a side-pack, which was supposedly suitable for wearing in either position. Incredibly, the superior *musette TAP* mle.1950 produced at the same time and for the same purpose was not issued to replace this inadequate item in general service — a situation which lasted until the end of the 1960s.

This latter, officially termed the *musette d'allègement type TAP* mle.1950 ('airborne troops light pack') was a direct copy of the US M1936 musette but with wide shoulder straps incorporating a British fixing system at the top and large snap-

hooks at the bottom. In 1951 sonic economies were made: press studs were replaced by simple buttons, and US-type buckles by a simpler design. Despite its sound design, this pack was judged to have too small a carrying capacity.

The 'bergam' (the French usage, like the British 'bergan', refers originally to the Norwegian town) was the rucksack used by Chasseurs Alpins before the Second World War. With very few modifications it reappeared as an all-arms rucksack 'mle.1945'. In 1951 its metal frame was replaced by a more flexible type. Both versions were used, by both paratroopers and other infantry units, at Dien Bien Phu.

The type of pack termed *sac à armature pliable et détachable type TAP mle.1950* does not seem to have been used at DBP. (It was not well received by para units, being found too heavy and cumbersome, and was eventually replaced by the 'bergam', at first in practice and later officially.)

Water bottles

Before general issue of the *bidon* mle.1951 the regulation water bottle was still the mle.1935 twin-litre type carried on a leather sling. At DBP this was still to be seen, particularly in the ranks of native units.

The US M1910 and British M1944 water bottles were carried, clipped to the US or French TAP web belts; the British M1937 type was also still seen in some numbers, fixed to all kinds of belts by lengths of improvised cloth strap passed through the buckles of its web carrier.

The French 1951 water bottle was an obvious copy of the US type, but with economies. The 'canteen cup' into which it fitted was of aluminium, but the 1½ litre bottle itself was of tinned iron; the stopper was a simple push-in cork. The cloth carrier had two cloth belt loops, instead of hooks to attach it to the belt eyelets. The new, larger belt buckle used from 1953 meant that the belt loops had to be enlarged.

HOLSTERS AND POUCHES

In the period 1953-54 the issue of the 1950 airborne troops' equipment to a number of infantry units went some way towards standardising and modernising the outline of the French footsoldier. However, a very varied range of weapons, a degree of personal choice, and shortages of specific items all led to the continued use at DBP of an inclassifiably wide variety of combinations of equipment.

Pistol holsters

Holsters corresponded to the wide range of pistols carried, both officially and by personal choice. Further variety was added by modifications to allow holsters to be worn with various equipments; and by local modification and improvisation. Examples

seen in photos include the US holster, and clip pouches, for the Colt M1911A1; holsters, modified or unmodified, for the German P38 and even P08; French holsters for the PA35 mle. 1937 (sometimes modified) and mle. 1948, both in leather; webbing 'TAP' mle. 1950 holsters, with clip pouches distinguishable from the US type mainly by the press studs; and others.

Grenade pouches

The most common type used was the US three-pocket pouch clipping to the belt; one or two of the three compartments were sometimes cut off. Also commonly seen were locally-made grenade carriers of open leather strapping, copied from the carriers used by French civilians for their 'baulettes', and designed to take all the main types of grenade in use.



Captions to colour photographs overleaf:

(G) Belts, top to bottom:
French mle. 1914, 55mm wide.
French mle. 1945, 45mm wide.
Alle. 1950 'Type TAP'.
Alle. 1950/53, 'RAPCO' buckle.
US M1936 pistol belt.
US M1936, the buckle replaced in

French service by a British-type buckle.

British 1937 pattern belt.
US M1923 cartridge belt.

(H) Equipment suspenders, left to right:

French 'Type TAP' mle. 1950
French leather suspenders, originally unmodified since 1892.
US M1936 suspenders.

(I) Water bottles, left to right, top:

US M1910, in carrier.

French mle. 1935.

British M1944, in carrier.

Below, left to right:

British M1937, sling carrier.

French mle. 1950 — early carrier with press studs, rimmed bottle below aluminium cap, bottle in later carrier with 'lift-the-dot' fasteners.

(J) Tools, left to right:

Wire cutters; billhook; US entrenching tool; hatchet; pelle-pioche combination. All were standard issue items, but issued with carriers which could be fixed to the US or 'TAP' web belts.

(K) Pistol holsters, left to right, top:

French mle. 1937 holster for PA35, modified to fix to the US or 'TAP' web belts.

Holster 'Type TAP' mle. 1950, accommodating all automatic pistols; then in French use, it could be fixed to belts by a US-type wire hook or a belt loop, both being provided on the rear.
Locally made leather holster, accommodating several types.

Locally made type modelled on the US shoulder holster, but in this case only fixing to a belt.

Left to right, below:

US holster for M1911A1 pistol.
US M1912 double pistol clip pouch.

Double clip pouch 'Type TAP' mle. 1950.

Leather mle. 1948 holster for all types of automatic pistol.

(L) Magazine and cartridge pouches, left to right, top:
Pouch for sub-machine gun magazines, 'Type TAP' mle. 1950, front and rear. The sling could be partly removed, as in rear view.
US double carbine slip pouch.

Locally made canvas and leather pouch for MAT-49 magazines.

Leather 'all arms' pouch for MAT-49 magazines, this example modified for some other use with an added zipper.

Left to right, below:

Locally made leather pouch for MAT-49 magazines, clearly modelled on German types; such three- and four-pocket pouches were common before the appearance of the issue pouches.

Cartouchière mle. 1945, above mle. 1945 modified. Our and inverted version, and rear view, of cartouchière type TAP mle. 1950.

(M) Top left: 'Large model' magazine for FM24/29 magazines, 'all arms', mle. 1950. Note D-rings, part of system allowing sling to be rigged as pack-type shoulder straps. Below left: 'Small model', carried only on the sling. Top right: All-webbing 'Type TAP' mle. 1950 magazine for five magazines, with rear belt loops and removable sling for optional arrangement. Below right: 'Type TAP' mle. 1950 pouch for rifle-grenades, shown to show removable part of sling stored under flap. Centre: Early example of the first aid pack type II/48 'for parachutists and commandos'.

(N) Packs. Top left: Alle. 1931 rucksack 'with flexible frame' — from this angle, indistinguishable from the mle. 1945 'with rigid frame'. Top right: Although now made in modern materials and colours, the simple haversack (issued into the 1940s) was essentially unchanged since the 19th century. It was widely used by native troops in 1954. Below left & centre: The light airborne troops' pack, mousset d'allégement type TAP mle. 1950, with US type buckles and (center) French buckles. Below right: The unsatisfactory 'all arms' light pack mle. 1950; it has an optional sling/shoulder strap arrangement like that of the 'large model' machine gun magazine magazine.

(All colour photographs courtesy J-F. Bousarello)

A Legionnaire of 1^{re} BEP fords a stream during Operation 'Castor', the taking of DBP on 22 November 1953. He wears the tenue de sain mle. 1952, with bush hat and, unusually for a paratrooper, leather ankle boots and US gaiters. His pack is the 'lightened airborne troops' type'; the mle. 1950 airborne troops' webbing includes, exceptionally for this early date, a 1950/53 belt with 'RAPCO' buckle.

Rifle pouches

The brown leather cartouchières mle. 1945 and mle. 1945 modifications, issued in pairs, had belt loops on the rear surface and a simple wire D-ring which engaged with the hook on the suspender of that equipment set; the pouches

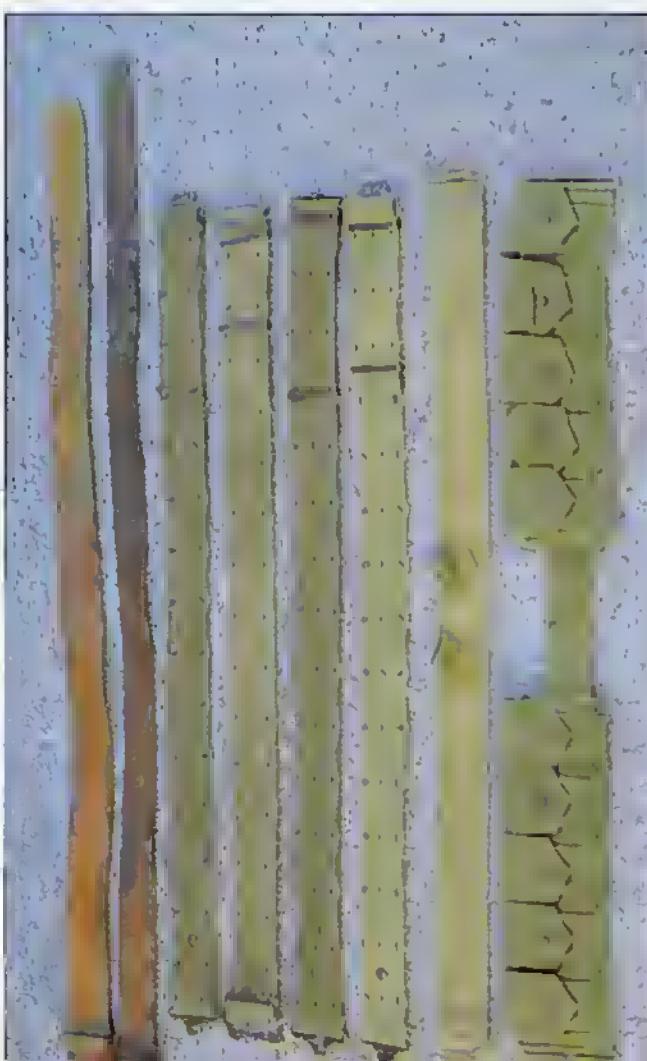
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H



I



G





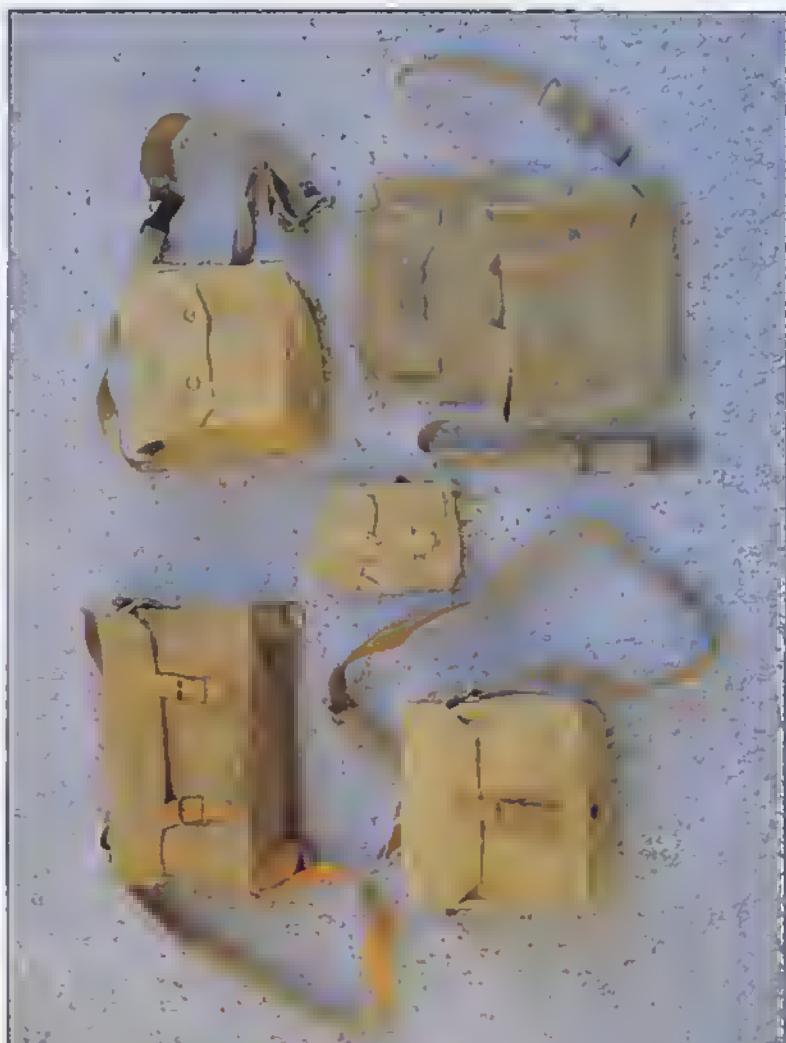
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M N



K





A typically wide mixture of webbing and equipment displayed by paratroopers of 3^e BPUN burying their dead near Seno, Laos, in January 1954. (Left foreground) French mle.1951 water bottle, US entrenching tool, British 1937 'universal pouch' probably containing FM24/29 accessories, and FM24/29 cleaning rod in its long case. (Right foreground) British 1944 water bottle in a French carrier; this man has added a third strap fastener to his trouser cargo pocket. Paratroopers did not usually carry entrenching tools on the belt, preferring to fix them to packs.

continued from page 21

fastened by flap-straps pierced to fit over brass studs. The webbing pouches type TAP mle.1950 were made in two-cell pairs, and fixed to the belt eyelets by means of a large US-type wire hook; the separated flaps fastened with press studs, usually in two possible positions but sometimes in one only. Also still in use, either for personal ammunition or for LMG magazines, was the British 1937 'universal' pouch; and the US M1923 rifle belt was still worn in some numbers. Particularly among native troops, even the old French M1916 leather pouches could still be seen.

SMG & carbine pouches

The most common sub-machine gun magazine pouch — because the most practical — was the French webbing 'TAP' type. This had five single-magazine compartments; two belt loops on the back were supplemented by a partly removable sling (stowed under the flap when not in use) so that it could be slung round the body at will. Occasionally it was worn fixed to the suspenders by means of two large spring-hooks. From 1953 the belt loops were enlarged to accommodate the 'RAPCO' belt buckle.

The French never manufactured magazine pouches for the US M1 carbine, using the American pouches exclusively; sometimes a D-ring was added to the back to allow attachment to the suspender.

Light machine gun pouches

Magazines for the FM24/29 light machine gun were carried in the all-webbing musette porte-chargers de FM type TAP mle.1950, which also accommodated the shorter magazines for the

BAR; its general appearance resembled that of the SMG pouch.

Both airborne and infantry units used the *musette toutes armes* mle.1950 for LMG magazines, made partly in webbing and partly in leather. There were two different versions, 'large' and 'small', each carrying magazines and LMG tools and accessories, each fitted with a leather sling with a prong buckle, and etch with internal leather reinforcement, which made them sturdier than the all-canvas 'TAP' model. The large version had two leather loops sewn to the rear surface, and two D-rings; the leather sling could be removed and arranged through these loops, its spring-hooks engaging with the D-rings, to make a shoulder strap system by which the bag could be carried on the back.

There also existed — officially — an 'airborne troops mle.1950' all-webbing pouch, similar to that for the FM magazines, for the curved magazines of the mle.1931 type A2 'Reibel' machine gun. Although this weapon

was certainly used, the author has never found either an example or a photo of this pouch, and the 'all arms' web and leather equivalent was no more common.

Rifle grenade pouch

A *musette type TAP mle.1950* was produced — again, to a design similar to that of the SMG pouch — to carry four mle.1948 rifle grenades as used with the MAS36LG48 rifle; but it is not often seen.

First aid pouch

The first aid pouch designated *trousse à pansement individuelle pour parachutiste ou commando type H/48* could be fixed to either the belt or the suspenders by means of four tapes.

FOOTWEAR

The most popular boots in the Far East were officially called *chaussures de brousse*, 'bush boots', but colloquially *patangas*, which roughly translates as 'splashers'. Of canvas and rubber composite construction, varying in colour from dark brown to olive drab, they existed in several slightly varying models, with

from five to eight or even ten pairs of eyelets depending upon type and size. At first a private purchase item, they were later issued (in an inferior model) by the Commissariat. A second, better made version was subsequently issued, and was retained into the Algerian War.

Although officially replaced in the Expeditionary Corps by the *brodequins mles. 1941* and *1945*, the old *mle. 1917* leather ankle boot in fact remained the most common right through the Indochina War. Less reinforced and thus more comfortably flexible than the new pattern, they were better suited to colonial campaigning. All boots had hobnailed soles until 1952, when rubber soles were introduced.

US ankle boots were sometimes issued; but the leather was not strong enough, and the soles wore smooth too easily. These

boots, and the *M1943 double-buckle 'rangers'*, were often found remodelled with nailed French soles.

With all these boots a variety of webbing gaiters were worn: US issue, French *mle. 1945*, apparently French *mle. 1951*, and British *1937* pattern. The *mle. 1945* resembled the British pattern but with a different fastening system, copied from pre-war French leather gaiters.

While all these types of footwear might be found in airborne units, paratroopers normally wore jump-boots. The *hottes de saut mle. 1950* had 12 or 14 pairs of eyelets, depending upon size. The moulded rubber soles, with a many-cleated pattern, were screwed to the uppers. In 1953 a new type appeared; the soles were now sewn, and the cleat positions changed to allow space for the stitching. The cleat pattern itself was similar to that on the screwed soles; but a variant was sometimes seen which had a pattern of 'false nails' on a sole of reduced thickness. **MT**

17 December 1953: this guard of honour for the arrival of Grn. Navarre all wear the liner of the French 'all arms' helmet *mle. 1951*.



A Singular Webley

MARTIN C. PEGLER

The restrictions placed upon firearms ownership in Britain make the collection of attributable war souvenirs a less than easy task. Undoubtedly, many thousands of historic weapons have been surrendered and destroyed over the years. Others lie unrecognised in public or private collections where their antecedents remain a mystery: the names or initials which they bear no longer hold any meaning. Occasionally, however, an item surfaces which proves to have a traceable history, often recognised only through an astonishing set of coincidences.



The pistol in question found its way into the hands of a collector who knew my interest in both firearms and the development of the early Tanks, and who approached me in the hope that I might be able to shed some light on the gun. As the photographs illustrate, it is an early wartime manufacture Mk VI Webley, of 1915 date, and in .455 calibre. It is in a fitted oak box, with lanyard and ammunition. There is also a holster, of which more later. Its condition is best des-

Alan Scrutton as a lieutenant in B Bn., c. January 1916, when the unit was still training as HBMCC. (Courtesy The Tank Museum, Bovington)

cribed as 'having seen service', with 60% bluing remaining, but considerable wear to muzzle and cylinder, and a chipped left grip that has been smoothed by much handling. The bore is good and the action tight. On the base of the buttstrap is stamped 'B Bn T.C.', and on the rearstrap of the pistol are the initials 'A.E.S.'

task of laying the marker tapes ahead of British lines that would enable the tanks to find their objectives. Despite being shelled and sniped he succeeded in completing the job. Zero hour saw Scrutton with the commander of the New Zealand Infantry whom the tanks were assisting, standing on a dugout roof. The detonation of the mines laid under the ridge blew both men into the trench.

His staff experience was called upon when, in July 1917, he made the arrangements for the visit of King George V to the Corps Depot at Bernicourt, followed shortly afterwards by a visit from King Albert of Belgium.

At the end of July Scrutton and his battalion moved into the Ypres Salient to assist the



Above

The Webley pistol Mk VI, dated 1915, in its oak case with a bayonet, ammunition and spares.

Centre:

Close-up of the baton marking on the Webley — all are polished rather than engraved.

The marks were straightforward in decipher. The first referred to B Battalion, Tank Corps, and effectively dates ownership of the pistol to pre-Christmas 1917, when the battalion letters were exchanged for numbers. 'B' thus becoming 2nd Battalion⁽¹⁾. The roll of officers for the company did indeed confirm one Captain Alan Edward Scrutton, formerly second lieutenant in the 28th London Regiment (Artists' Rifles). Alan Scrutton, it transpired, had an eventful war.

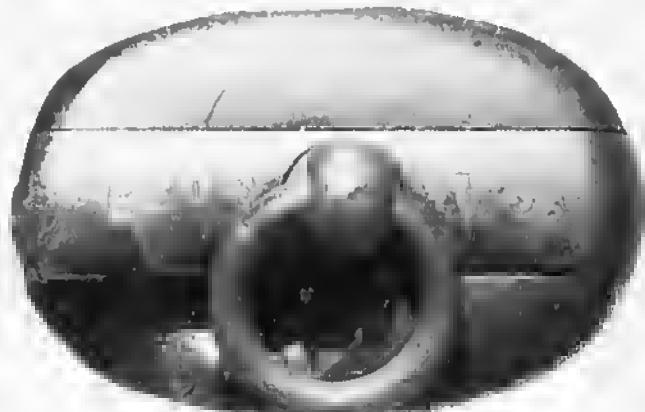
The Artists' Rifles were a

rather élite Territorial unit comprised mainly of ex-public school and professional men. Alan Scrutton followed his brother John into the Artists' in 1909, and on the outbreak of hostilities in August 1914 the battalion went to France with the BEF. Scrutton was promoted to second lieutenant by the popular vote of his fellow soldiers⁽²⁾ (the Artists' Rifles was a very democratic unit) in October of the same year; and he caught the attention of Gen. Kidgell, Chief of the General Staff — not that Scrutton was an easy man to miss, being a powerfully built 6ft. 2in., with a forceful personality. Throughout the long Somme campaign he served as ADC to Gen. Kidgell and Haig, while bombarding them with requests to be transferred to a fighting

unit.

The efforts of the first tanks used in action in September 1916 had greatly impressed Scrutton, and he asked specifically to be transferred to the young corps. He had an uncomfortable interview with Haig, who asked the young officer to change his mind. Scrutton refused, and Haig replied, 'I hear you're going to the Tank Corps — you realise that soon there may not be a Tank Corps?'⁽³⁾ Irritated, Scrutton replied that he thought the tanks would win the war. He joined the Heavy Branch Machine Gun Corps at Christmas 1916, and learned the intricacies of tank-commanding. From then on his life became more interesting.

B Battalion's first action was on 7 June 1917 at Messines, where he was given the



infantry during the Passchendaele offensive at Broodseinde. It was a dismal failure; the vehicles became bogged in the waterlogged morass, and were picked off by artillery. Alan Scrutton was wounded at this time, although records do not say how badly. He was evacuated to a Casualty Clearing Station, but returned to duty three weeks later. The Ypres Salient was no place for tanks, and they were withdrawn.

After considerable bullying by Gens. Fuller and Elles, via the offices of Gen. Kidgell, Haig agreed to give the Corps one final chance to show what it could achieve. To his consternation, Scrutton was summoned to dinner with the Commander-in-Chief and asked if the infantry would be able to follow tanks through

wre⁽⁴⁾. Scruton assured that Haig they could, and suggested a trial run be made. This was done, and proved to be successful. Never one to rest on his laurels, Scruton also asked that he be 'burnt in mind' for whatever the outcome was. The outcome was Cambrai, the first chance for the Corps to show what it could accomplish under the ideal conditions of firm ground, surprise and adequate preparation.

LEADING TANKS ON FOOT

Scruton, as usual, had determined to do things his way; and went ahead of his section on foot as they advanced, into the face of heavy small arms fire. So successful were the tanks that they eventually came to a halt having broken through the enemy lines and advanced as far as the l'Escail Canal, with empty country around them and not a German in sight. Such success was too much for the Army HQ to comprehend, however, and the promised cavalry reinforcements never arrived, forcing a wholesale withdrawal and eventual loss of the ground gained.

The battalion found itself unwittingly in the front line of the great German offensive on 21 March 1918. Within two days 70% of the battalion became casualties, and only eight out of 30 tanks were serviceable. Crews dismounted their machine guns and fought for a week as infantrymen, with Scruton commanding an improvised company of Lewis gunners acting as rearguard, for which he received a Mention in Despatches (*London Gazette*, 25 May 1918). The battalion was withdrawn and refitted with new Mk V tanks, going into action again with the 5th Australian Brigade on 8 August. Scruton was again wounded, when a shell splinter the 'size of an army knot' struck his steel helmet, leaving him dazed and presumably with the mother and father of all headaches. Despite this, he again led his company on foot to their objectives; but was aghast to

see the vehicles knocked out one by one by an anti-tank battery near Bayonvillers. Impotent to warn the slowly moving tanks of their danger, he seized the rifle of an infantryman and ran round the flank of the gun position, upon which he opened fire, forcing the gunners into cover until fire from a 6-pdr. knocked out the remaining gun⁽⁵⁾. For this act, and for his continual insistence on leading his tanks into battle on foot, Scruton received the Military Cross,

It was to be his final act in the front line; in September 1918 he was transferred back to England to act as an instructor at Bovington Camp during the formation of a new tank battalion. He retired from army life in 1919 with the rank of major; and for many years ran the Officer's Club in London. At the outbreak of the Second World War he was granted an



The revolver with its holster.

Below:
Scruton's medal group comprising: Military Cross ('Maj. A. Scruton Aug 8 1918'), 1914 Star with Rose (Pvt. A.E. Scruton 28 London Regt.'), War and Victory Medals ('Capt. A.E. Scruton'), and his Defence Medal for Second World War service.



emergency commission in the Royal Tank Regiment, eventually retiring in 1945 with the rank of lieutenant-colonel, having been what the War Office euphemistically terms 'Specially Employed'. He died, in Suffolk, on 8 August 1974 — the 56th anniversary of his winning the Military Cross.

The long arm of coincidence stretches out from Alan Scruton in curious ways. Many years ago I purchased his medals, along with an

empty holster, in a junk shop. About two years later, through the quite random perusal of an auction catalogue, I found and obtained the identical group of medals awarded to his brother Capt. J.A. Scruton, of the Artists' Rifles, Royal Engineers and Tank Corps (MC, 1914 Star and Bar, War and Victory Medals). That his pistol should also surface, and find its way to me, is a coincidence that almost beggars belief. [M]

Notes:

- (1) *History of the 2nd (B) Battalion, Tank Corps* (privately printed, 1919), courtesy the Tank Museum, Bovington.
- (2) *Roll of Honour of the Artists' Rifles* (1916).
- (3) As quoted in *The Boisplate War*, John Finley (1968).
- (4) *Ibid*.
- (5) Transcribed from the original report by A.E. Scruton on the action of 8 August 1918; PRO WO195/2048

The author would like to express his thanks to the present owner of the Webley pistol for permission to photograph it and use it for the basis of this article.

The British 1942 Battle Jerkin (I)



Commandos of 48 Royal Marine Cdo., 4th Special Service Brigade landing under fire at St. Aubin-sur-Mer at the junction of Sword and Juno Beaches; D-Day, 6 June 1944. All these men wear the Battle Jerkin, which was issued in small numbers to assault troops of most 4th SS Bde. units, though only 47 RM Cdo. was completely equipped. The man in the foreground wears his jerkin unbuckled, no doubt in case he had to jettison it in a hurry if forced to swim for his life. He has the light respirator slung separately, and a toggle rope stuffed into the machete sleeve of his jerkin. (The vertical object below his right hand is not storage, but a rifle thrust muzzle-down into the beach.) Right background, two men unload a Wilhite motor-scooter. Left background, a man with his mug hung on the toggle fastening of the left side pocket, and a gas tape tied to the rear waist through the ventilators; below this is a skein of rope, and on the upper park flap his steel helmet. (Imperial War Museum B5218; photograph, Lt. Handford)

IAN SADLER

In 1942 the Chief Ordnance Officer of the Field Stores, Aldershot — Col. E.R. Rivers-Macpherson OBE, DSO — devised an item of infantry equipment which has become both controversial, and highly sought-after by collectors. The Battle Jerkin was issued to few units, and appears in few wartime photographs; documentary evidence is scanty; and arguments over the merits and weaknesses of the equipment are unresolved to this day. In this first part of his two-part article the author, a collector, quotes from the few official documents which survive; and offers readers a detailed and illustrated physical description.

THE ARGUMENTS

The arguments advanced by Col. Rivers-Macpherson against the then-standard 1937 webbing equipment and in favour of his invention are set out in a pamphlet which he wrote — *Battle Jerkin*, dated 22 March 1943 but composed from earlier material. The following extracts are self-explanatory:

"The tempo of the modern attack has increased to such an extent that it is the general consensus of opinion that some new form of equipment is necessary for the assault man. The equipment must be of such a nature as to permit the man to negotiate all types

of obstacles with ease; it must be silent; and it must be so designed that a great variety of articles can be carried without any complicated changing over by means of straps and so on, and must be easy to take on and off. It should permit the free use of his weapons in any position.

"As the new battle technique was evolved, so did the opinions of Commanding Officers rise in condemnation of the web set, which was described as clumsy, noisy, restricted mobility, difficult to get through obstacles, no flexibility for weapons, cramping, etc.

"It must, however, be

admitted that the web equipment was the high spot of its day, when the tempo of the attack was infinitely slower than what it has developed into now; but one can say without hesitation that basically the web equipment was no advance on what our men wore one hundred years ago, as, briefly, it is a belt around the waist, pressing on the diaphragm, with some sort of braces and straps on to which are attached various containers, all pulling away from the centre of gravity.

General comments

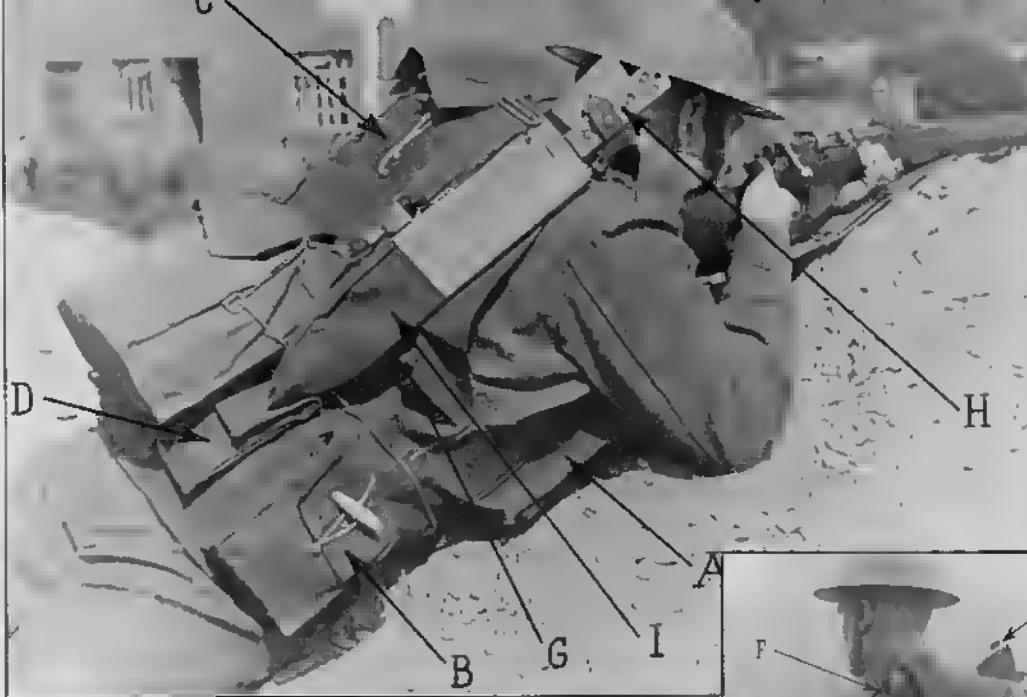
"The situation of present weapons and the webbing is to say the least not very satisfactory, never mind the new ones which are just coming into service. It is axiomatic that body weapons are largely dependent on personal equipment; therefore the latter must be subordinated to the needs of the former, in so far as design is concerned. The assault man must reach his objective in the best possible physical condition so as to develop the maximum hitting power of his weapons.

"The articles which a soldier has to carry must be most carefully distributed, due regard being paid to the balance and comfort (thus



Above:

Photographed at the Didcot RAOC Depot in 1921, the then-Ajg. E. R. Rivers-Macpherson OBE, inventor of the jerkin. Born in 1884, he joined the Highland Light Infantry as a second lieutenant in 1907. Colonial secondeens found him a lieutenant with the West African Rifles at the outbreak of the Great War; in October 1915 he went to the Gordon Highlanders as a captain, and in August 1916 to the Shropshires as acting major. He transferred to the Royal Army Ordnance Corps in 1920, serving at Didcot and in Germany, Hong Kong and Malaya in the 1920s and 1930s. He retired as lieutenant-colonel in 1938, but was back in the army in 1939 and promoted colonel in 1941. He retired in 1944, and died in Canada in 1958. Apart from his military career he was a Fellow of both the Royal Geographical Society and the Royal Society of Arts, and wrote on a number of subjects. Few people may remember him today; but his shrewd brainchild is the direct ancestor of a number of combat harnesses still in use today all over the world. (RAOC Museum, as are the wartime close-up photographs of the jerkin published in this article)



permitting the correct carrying muscles to be brought in to play), without impeding his movements or interfering with the instant and free use of his body weapons as and when required.

The weight should be carried as near to the man's centre of gravity as possible. The solution appeared to lie in some sort of simple and easy fitted garment, on the lines of a "Poacher's Jacket"; thus the Assault Jerkin was evolved.'

THE PROVISIONAL PATENT

Col. Rivers-Macpherson's belief in the effectiveness of his invention is further explained in the original provisional patent, No. 8041 of 1942:

Objectives

The following are the advantages claimed for this equipment.

1. It is scientifically designed so as to defer the onset of fatigue and stress, thus permitting the wearer to reach his objective in the best physical condition and to use his weapons to full advantage.
2. The layout of the pockets allow easy access to all weapons and allow various loads to be easily accommodated to suit combat conditions.
3. By just undoing two buckles it can be slipped off in seconds.
4. With the Jerkin on the Commando May West [sic] can be worn underneath and

inflated, the Jerkin then protects it.

5. It is more comfortable and easier fitting than webbing, and offers no resistance to obstacles, eg barbed wire, which rides over it.

6. It can be worn over a multi-layer of clothing without an increase in size, or waste of time to adjust as in webbing.

7. It is silent when done up fully, very important for night patrols behind enemy lines.

8. It is waterproof and it gives protection to the wearer from inclement weather (note the Groundsheet is to be restricted in the future).⁽¹⁾

9. The pockets can be altered by the unit tailor to suit any future requirements either in size or position.

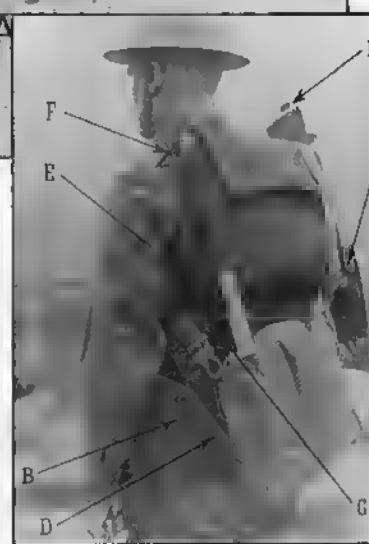
10. It has better camouflage properties and can be dyed to suit the terrain, ie sandy one for the Desert, dark brown for Europe.

11. Repairs to the fabric can be carried out by the unit tailors and present no difficulty.

12. The Jerkin is lined in the areas where wear would take place, ie on the shoulders, and therefore less wear will result on the Battledress Tunic, unlike with the use of webbing.

13. The working life is not expected to be any less than for webbing, ie 1000 working hours.

14. Economy in accounting and storage. The Battle Jerkin needs only three ledger head-



ings viz: Small, Medium, Large but the '37 webbing equipment requires no less than 26 separate headings.

15. Shipping space of all kinds, ship, airplane, or lorry is half that of '37 webbing.

Tactical advantages

In summing up the tactical advantages of the Jerkin, one cannot do better than quote a few of the many reports received from the units and battle schools who have given the Jerkin a thorough test.

Comfort In Use

Only half the weight of webbing; 3.5 pounds against 7.5 pounds unloaded condition, less tiring to wear than webbing.

When fully loaded it was found to carry evenly and the equipment was balanced.

It was found that there was less to catch on barbed wire as no loose or hanging parts snagged on the obstacles.

There was complete freedom of movement of the limbs, with no part digging into the groin as the '37 pouches did.

This series of RAOC photographs were presumably taken during trials in mid-1942. Note that the key letters used on the originals are in a different sequence to those on the line diagrams which we have followed in the body of this article. In each case differences between the dark brown versions shown in the photos, and the sand-coloured version described in the text, will be pointed out.

This right rear view shows a full 'sock-type' machete sleeve rather than an open end; and on the right ribs, just behind the universal pouch, a string-whipped drain hole, later deleted. Note early-war 'small box respirator' in its satchel slung over the top pack of the jerkin and tied in place round the waist.

Left:

Left rear view. Note that the tool belt sleeve (here 'F') has a slit at the top so that the SMLE bayonet could be carried in this position — this was later deleted. The leather knot washers are visible on the outside of the pack flap. The left side humb pocket (here 'B') is the same size as the one on the right in this early version; later it was enlarged to take the waterbottle.

Below:

The strips of doubled fabric intended to act as 'sting stops' can be seen clearly on the shoulders. Note early, narrow, upper front fastening strap; and whipcord (here 'F') by which loose stowage could be tied on at will.



It was found that all the pockets can be reached easier and no difficulties in removing humbs or magazines and ammunition.

It was not found to be any hotter to wear than the webbing.

It could be slipped off very quickly and on a march the top strap could be left undone as could the belt, this in no way prevented the wearer from carrying the load but aided in the cooling of the wearer.

Water Resistant Qualities

It was found that even in very heavy storms the Jerkin was



Left:

Reconstruction — an assault infantryman of 2nd East Yorks., 8th Inf. Bde., British 3rd Inf. Div., one of the 'first wave' D-Day units issued with the jerkin. He wears an original dark brown jerkin; note later, inch-wide chest straps. He has the tool roll for the 2in. mortar slung round his torso under the jerkin, to hang on the left thigh. (Courtesy Jonathan Heyworth)

Above:

Reconstruction — right rear of the loaded jerkin. The gas cape is tied above the pack, and the light respirator is tied centrally above the lower pouch by means of the ventilation holes. The 2in. mortar is carried in the 'machete sleeve'. (Courtesy Jonathan Heyworth)

Right:

Reconstruction — left rear of the loaded jerkin. In this position the waterbottle was hardly less awkward to reach than it was when carried in its webbing harness. Note GS shovel carried with the handle thrust through the ventilation hole, and the head supported by the whippet ties on the shoulder. The 'Soft Kit' pocket is empty here; if it was full the lower part of the rear storage would bulge out more. (Courtesy Jonathan Heyworth)

waterproof and even in persistent drizzle.

The pockets and the back pouch drained very quickly after total immersion of both the Jerkin and the wearer and as a result it became no heavier.



Opposite above:

Rear view of sand-coloured Battle Vest, with machete and No.4 bayonet in place; and, attached to the right front strap, a 1944-marked Canadian webbing automatic pistol holster as supplied with the English-made 9mm 'Browning Hi-Power', not standard British issue but acquired by some special troops. Note rounded flap of bottom rear pocket. (Author's photograph)

Above:

Inside of the sand-coloured example, showing the document pocket inside the right chest area, the 'Soft Kit' pocket, the size marking, and the manufacture mark 'H&S' with the Ordnance arrow and '43'. (Author's photograph)

Above right:

Front view, showing angle of hilt-set. Note details of waist fastenings; and early vertical scabbard-slip slot in left chest outside universal pouch. (Author's photograph)

Carrying space

It is spacious and had no trouble in carrying all that was asked of it. It is also better in that the load can be altered without the need to spend time in altering the layout as would be the case in the '37 webbing.

In Action

In all forms of firing weapons or throwing bombs it was found to be superior to webbing, also no form of constriction of breathing or impeding of limb movement was encountered.

Concealment

It is better suited to concealment than webbing, ie dark brown is far better camouflage. Plus it is silent when worn, a must for night patrols.



Right:

Again identified as an early model by the $\frac{1}{2}$ in. chest strap, this example has no holster attachment strap at lower right front. Note how the '37 webbing set holster has been attached to the right waist fastening strap instead.

Below:

Close-up of the left hand bomb pocket, still in its early smaller size. The No.4 bayonet is carried in the front sleeve; and above it can just be seen an SMLE bayonet carried in its slot, with a horizontal scabbard stud slot which contrasts with the vertical equivalent in the examined sand-coloured jerkin.

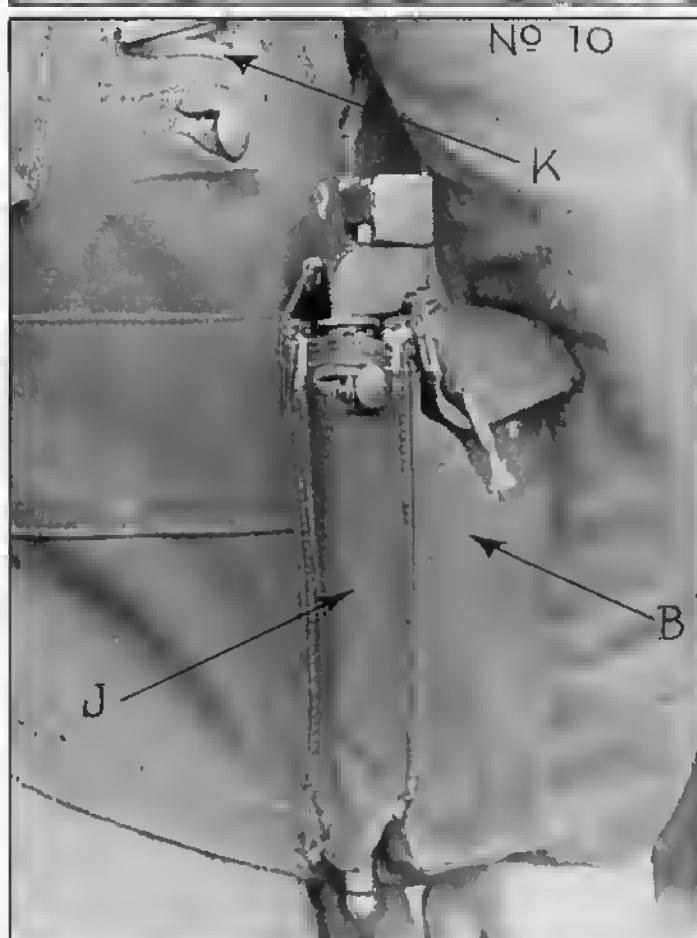
To sum it up, the outstanding qualities of the Battle Jerkin can be said in three words: SPEED, SILENCE, SECURITY.'

DESCRIPTION OF THE BATTLE JERKIN

Without commenting upon the credibility of the detailed claims which Col. Rivers-Macpherson made for his invention, which are not all supported by anecdotal evidence at least, we proceed to a physical description. The subject is a jerkin of the manufacturing batch finished in a sand colour, intended for desert use; these were not, to the author's knowledge, used in action, but the physical differences from the dark brown version are apparently minimal, and are detailed in the captions to the accompanying photographs⁽²⁾.

General

The jerkin is made from a heavy cotton duck material which is waterproofed and dyed. It is cut on the lines of a sleeveless jacket. The lower front corners are rounded off. All the edges are stitched in two rows $1\frac{1}{2}$ in. apart; and on the inside the edge is lined with a thin cotton tape $\frac{5}{8}$ in. wide, to prevent the turned edges of the jerkin from fraying and to lessen wear on the Battledress worn beneath. The inside is lined in the shoulder area only, with a thin cotton fabric; this material is also used to make the document pocket in the right hand side, in the same position as on the Battledress Blouse. It is also used to make the so-called 'Soft Kit pouch'



which runs the full width of the inside bottom back of the jerkin; this is 8in. deep, and is marked SOFT KIT. The only other markings on the inside are the manufacturers' and Ordnance marks ('H & S' / arrow / '43'); and the size,

printed e.g. SMALL, MEDIUM or LARGE on the lined area of the shoulders at the back. The example examined is marked — like other sand-coloured jerkins which have been seen or photographed—TRAINING USE ONLY.

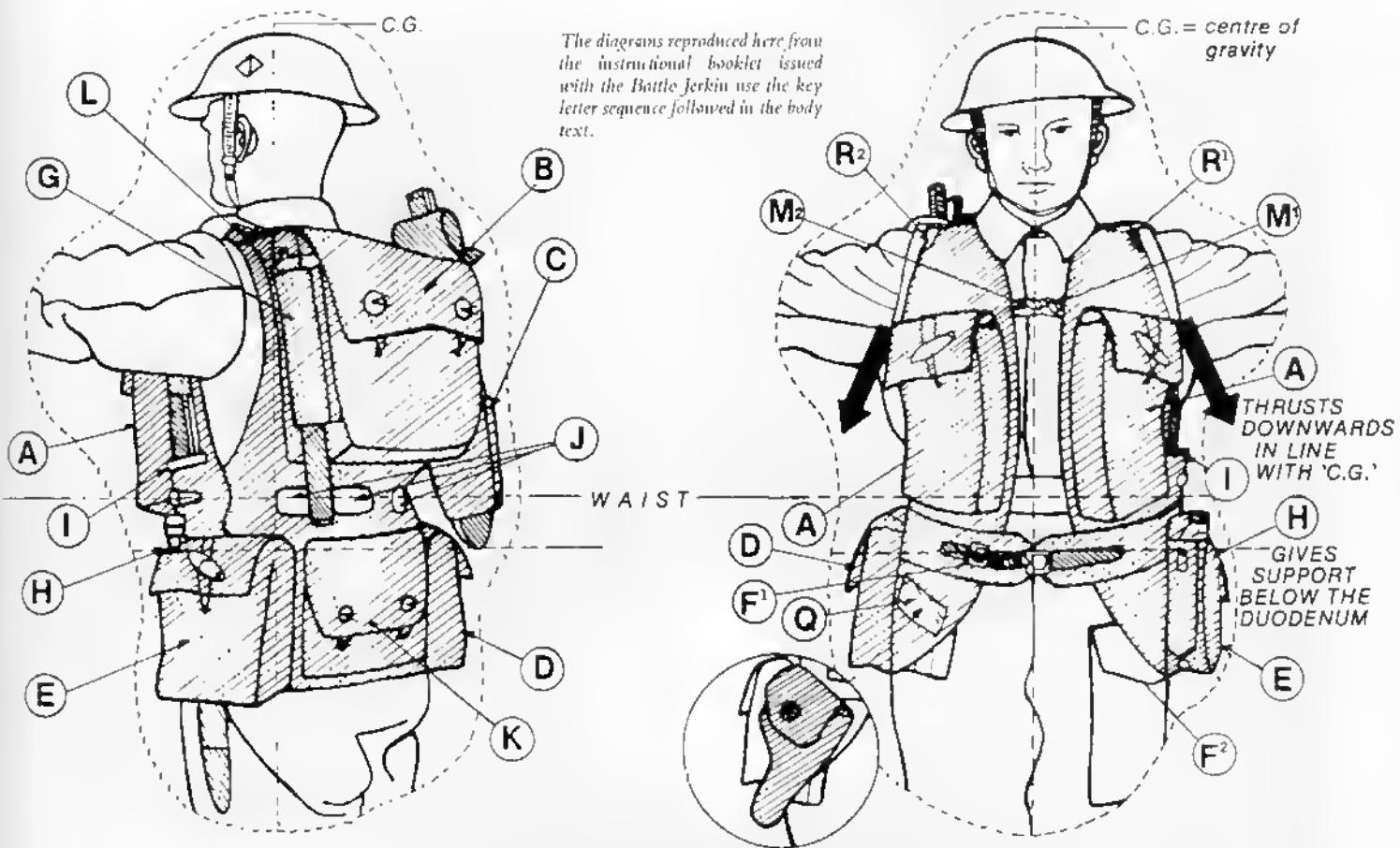
In the following description of the jerkin's pockets and fittings, **bold** letters cross-refer to some parts of the key appearing on the accompanying copy of front and rear drawings of the jerkin, reproduced from the instructional handbook issued with every example.

Front and sides

On the chest are two 'universal pockets', (A), cut in the curved shape of the Bren gun magazine but larger all round; these can expand to a depth of 2in. cut from the body. The flaps are cut square across the front, but due to the outward curve of the pouches they appear to be cut at an angle when the loaded jerkin is worn. The means of fastening the flaps — and the other compartments of the jerkin — is simple and cost-effective. In the centre of the outside top edge of the flap a loop of stout string is fastened into the material and knotted behind a large leather washer; to the free end is attached a large, unpainted wooden toggle. A similar loop of string is fastened in the same way into the face of the pouch, the free end tied off into a 2in. long loop which can be pulled up and slipped over the toggle.

Immediately above the top edges of these pouches a pair of short webbing straps are sewn, the right hand strap with a clawless brass frame buckle, for holding the two chest panels of the jerkin together; the length of the straps allows a good range of adjustment: (M2). The earliest model of jerkin had a $\frac{1}{2}$ in. webbing strap, but later examples had 1in. webbing.

In the left side panel, outside the left hand universal pouch and near its bottom edge, a horizontal slot is cut into the fabric, with a vertical slot below it, both being edged with thin cotton tape. This arrangement (I) was to allow the SMLE bayonet scabbard to be slipped inside the jerkin, its hilt protruding through the horizontal slot and the stud of its frog attachment through the vertical slot.



(Dark brown jerkins examined — e.g. that held by the Imperial War Museum — have a small external tab stitched to the left of the lower vertical slat, the tab having a horizontal slot lined with tape. The two superimposed slots thus form a cross, holding the scabbard stud more securely.)

Below the two front pouches a 3in. wide belt section, made of the same fabric as the rest of the jerkin, passes right round the waist. To the front right of this section two open frame buckles are stitched, with a corresponding webbing fastening strap, of the same type as the chest closure, stitched to the left side; (**F1, F2**).

Below this on the right front panel, set back from the cut-away edge, a strap is stitched at an angle, front end downwards; it is stitched at both ends and in the middle in vertical lines. This strap (**Q**) is to allow the attachment of a pistol holster.

Under the right armpit, its top edge level with the top edge of the belt section, is a pocket (**D**). It has a square-cut flap fastened with loop and toggle, and can expand to 2in. in depth. Under the left

armhole in the same position is a similar but larger pocket (**E**), extending 2in. above the top edge of the belt section. On the front expansion piece (i.e. the 'side' surface of the pocket) is mounted a fabric sleeve (**H**), open at top and bottom, with a tape-lined horizontal slot cut into it just below the top edge; this sleeve holds the scabbard, and the slot its stud, for the No.4 rifle bayonet.

All pouches have small central draining holes in the bottom surfaces, the edges whipped with string, and all fasten with loops and toggles.

Back

The back of the jerkin is cut square across the bottom. Behind the shoulders at the top is mounted a pack or pouch, with a square-cut top flap, the side expansion pieces extending up to form tabs which can be folded across inside the flap to help seal off the contents from rain. The flap is fastened with two loops and toggles, the toggles this time mounted on the inside of the flap with the knots and washers on the outside, to avoid snagging when passing under obstacles. On the outer face of the pack,

(**B**), are four loops of string in two vertical pairs, with the washers on the inside of the pack. These engage with the toggles of the flap, allowing some adjustment for expansion depending upon contents. The side expansion pieces of the pack are 3in. deep.

At the top edge of the right hand expansion piece is a narrow horizontal webbing strap with buckle. Below this, starting half way down the side surface and extending below it by 3in., is a fabric sleeve open at the top and bottom. This sleeve, (**C**), takes the machete in its sheath, the upper strap engaging the belt-loop of the sheath.

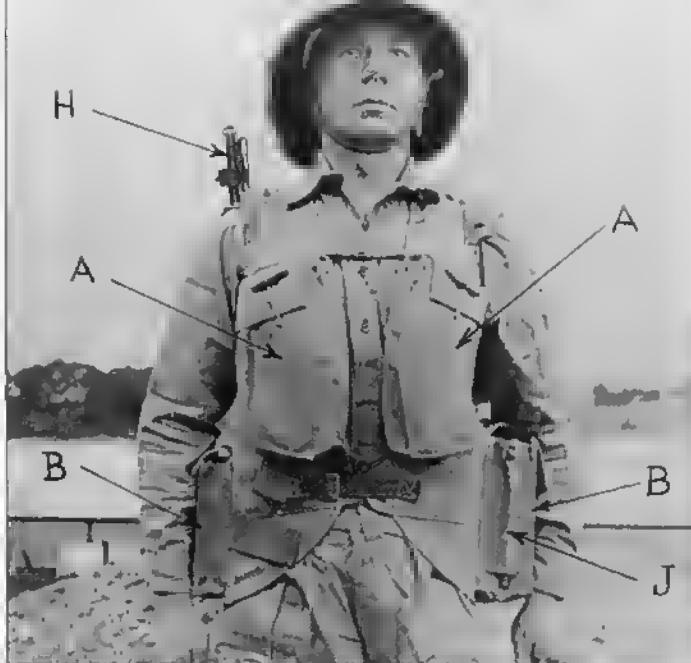
On the left hand expansion piece is stitched an 8in. long, 2in. wide fabric sleeve open at top and bottom, (**G**); this is intended for the hilt of the entrenching tool.

In the rear of the waist below this upper pack are three ventilation holes — two roughly square flanking one rectangular, all with rounded corners whipped with string, and lined inside with tape edging — (**J**).

Below these and the belt section, centrally on the out-

side bottom rear, is an unusual oblong pocket. This pocket (**K**) has no expansion side pieces; on the example examined it has the flap corners rounded off. It fastens with two loops and toggles like the upper pack. Its most unusual feature is that it is not fastened directly to the fabric of the jerkin, but attaches by two short tabs at the top and one at the bottom centre, allowing a space between the pocket and the jerkin — and thus allowing the expansion of the 'Soft Kit' pouch inside the jerkin, the outside pocket riding 'tethered' outside any bulge thus created.

There are two sets of holes, whipped with string, in the shoulder sections of the jerkin; a length of string is knotted on the inside of each behind a leather washer, the loose ends lying free on the shoulder area — (**L**) — for attachment of external items. It is notable that the sand-coloured jerkin described here lacks the two small raised 'stops' at the outer edges of the shoulder sections — (**R1, R2**) — fitted to the brown version to help retain equipment and weapon slings.



COMBAT LOADS

The total capacity of the jerkin is best described by quoting the official lists in the booklet issued with each jerkin and dated January 1943. Each pocket and pouch had an intended use, though photographs of the jerkins in front line use suggest that many soldiers exercised individual judgement.

Universal pockets (A)

In each, either two Bren magazines, or a pair of wire cutters, or one Boys anti-tank rifle magazine, or five Sten magazines, or six Thompson magazines, or 100 rounds of small arms ammunition (in bandoliers), or six grenades, or one Very pistol, or a pair of field glasses, or 200 rounds of pistol ammunition, or a pistol and ammunition.

Rear pack (B)

All the following, and more: gas cape, 48 hours' rations, iron ration, mess tins and cutlery, mug, blanket, groundsheet if issued, spare waterbottle, and extra ammunition.

Right hand pack sleeve (C)

Machete, or 2in. mortar barrel.

Left hand pack sleeve (G)

Entrenching tool hilt, or skein of toggle tape.

Lower rear pouch (K)

Entrenching tool head, or two 2in. mortar bombs, etc.

Right side pouch (D)

Four grenades, or two 2in. mortar bombs, or two slabs

of guncotton explosive.

Left side pouch (E)
Intended for the waterbottle, but alternatively six grenades, or two 2in. mortar bombs, or three slabs of guncotton explosive.

Right side pouch (F)

Intended for the waterbottle, but alternatively six grenades, or two 2in. mortar bombs, or three slabs of guncotton explosive.

Lower rear pouch (G)

Intended for the waterbottle, but alternatively six grenades, or two 2in. mortar bombs, or three slabs of guncotton explosive.

Right hand pack sleeve (H)

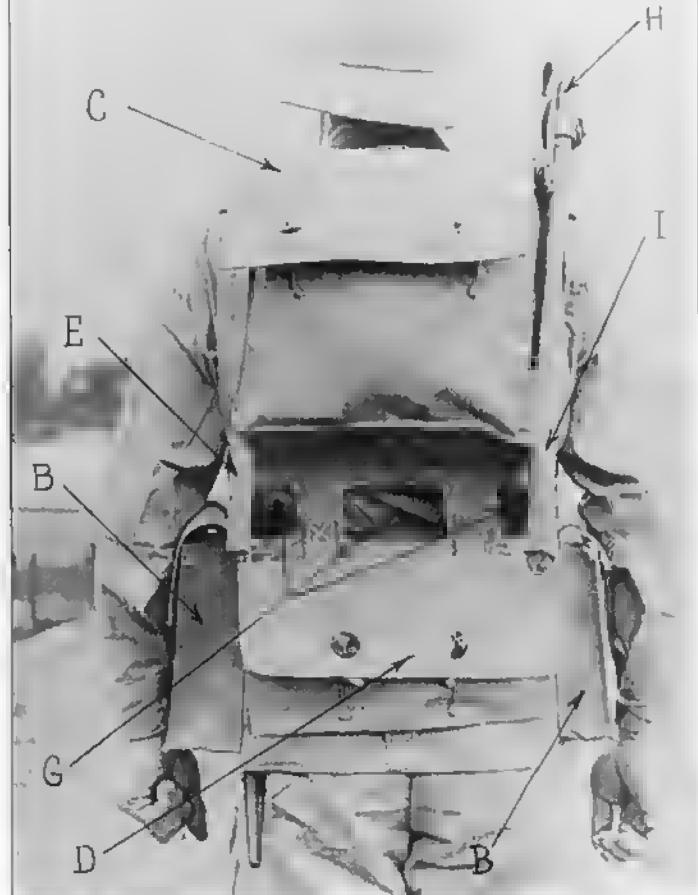
Intended for the waterbottle, but alternatively six grenades, or two 2in. mortar bombs, or three slabs of guncotton explosive.

Left hand pack sleeve (I)

Intended for the waterbottle, but alternatively six grenades, or two 2in. mortar bombs, or three slabs of guncotton explosive.

Inside pocket (J)

Maps, message book, personal items.



'Soft Kit' pocket

Spare shirt, pullover, socks, underclothes, towel, evenly packed to ride comfortably on the lower back acting as a cushion for items in (K).

Fully loaded, including an attached pistol holster, and either an SMLE bayonet or a knife in the slots (I), the jerkin could accommodate a load of some 75lb. weight.

MI

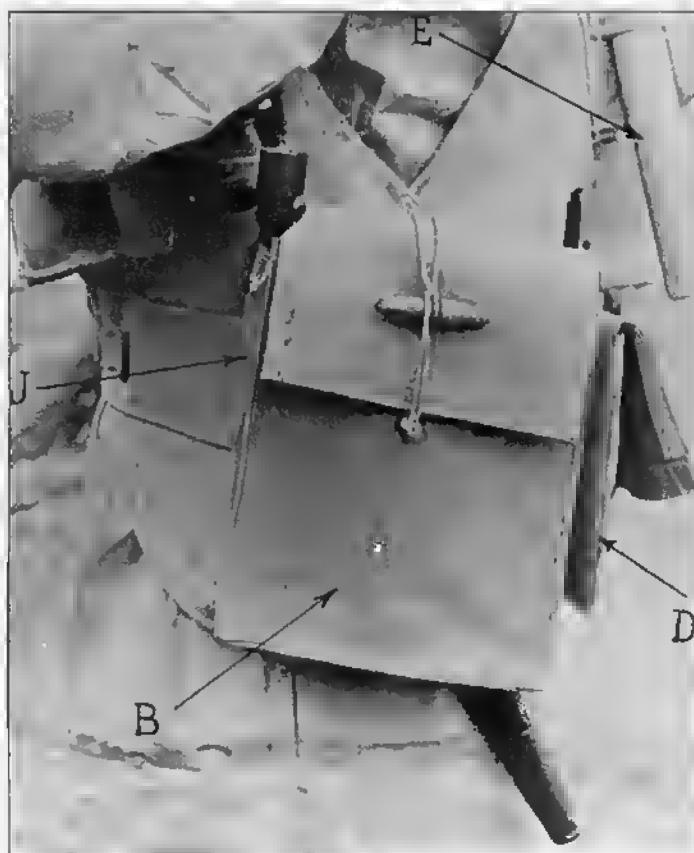
To be continued: Part 2 will cover and illustrate the use in active service of the Battle Jerkin; and the associated so-called 'Bren harness' or skeletal assault vest.

Notes:

(1) The Groundsheet Mk.VIII was declared obsolescent on 31 July 1943 (Changes in War Materials and Patterns of Military Stores, 31.7.43, Vol.III)

(2) Intended and made for use in North Africa, the sand-coloured jerkins appeared too late for that campaign and were relegated to the training rôle; all examples of which the author is aware are thus marked.

The dark brown jerkin saw active service in Europe and the Mediterranean. The author is aware of published claims that both green jungle and white snow versions existed; but has been unable to trace any documentary or other evidence, and believes these claims to be mistaken — in some cases possibly based upon individually camouflage-painted brown jerkins?



Whipcord ties (L)

For securing anything that could rest on top of the pack, e.g. gas cape, groundsheet, blanket, 2in. mortar baseplate.

Inside pocket

Maps, message book, personal items.

The 1990 California Military Miniature Show

BILL HORAN

In response to continual requests from our readers, we initiate in this issue an occasional series of photo-reports from the leading military modelling competitions in the UK and USA. Our policy on 'how-to' modelling articles remains unchanged; with several other publications covering that aspect of the military hobby, we feel it would serve no purpose for us to enter it. But since we recognise that a high proportion of 'MI' readers are also modellers, we are happy to accede to repeated requests to give occasional space to photographs of some of the finest military miniatures seen at the leading shows. Author/photographer BILL HORAN needs no introduction to the modelling fraternity.

On Sunday 1 April 1990 modellers from the western USA as well as from as far afield as Toronto, Texas, and even Swansea, South Wales converged on the Holiday Inn in Buena Park, California for the 6th Annual California Show, sponsored by the Southern California Area Military Miniature Society. The quality of miniature art on display was excellent, and the show was the biggest and best ever.

The festivities actually began on the Saturday afternoon at your correspondent's house, where the club held a barbecue to welcome the many visitors to the show. This was the club's way of enabling the many modellers, dealers and fans attending the show to meet and socialise prior to the relative chaos typical of any military miniature convention. The 'bash' was a great success, and many new faces were present as well as such veterans as Pat and Olive Bird (Series 77), Terry Worster, Mike Good, Brian Stewart, Chuck Smith, and Dave Kennedy.

In terms of both quantity and quality this year's SCAMMS show was without question the strongest



ever. The largest number of new painters in the southern California area was particularly encouraging.

Judging procedure

The California Show, like virtually all similar shows in

the USA and Canada, is run on the 'open' system whereby all pieces compete against each other: there are no classes or categories in the European sense, each modeller displaying all his pieces together in the form of

Below:
German Infantryman in Winter Smock, by Mike Good (stock figure by Verlinden); Silver Medal.

Below left:
Midshipman, US Navy, 1861, by John Bernier (Series 77 kit).



an exhibit; the sole judging criteria are imagination and skill. The judges — all active modellers, most of whom are also competing — select the ten best pieces in their designated judging area. Each piece is analysed by three judges working independently. Each judge is provided with an assistant, either a modeller who is unfamiliar with the system and would like to become acquainted with the procedure, or a modeller of outstanding ability being groomed to become a judge in future shows. Pieces selected by all three judges receive Gold Medals; those chosen by two out of three collect Silver; and one judge's vote is worth a Bronze Medal. The key here is that the judges be both balanced, fair, and unprejudiced.

diced against any particular style or subject matter; and be actively working in the hobby. Familiarity with the latest products and techniques is an essential qualification.

The Exhibits

As at any show, stock painted kits were very popular. John Bernier, a sergeant in the US Marine Corps, showed a wide variety of outstandingly painted kits, notably an American Civil War Navy Midshipman by Series 77, and the Russian Cossack figure by Elortuet. That figure also won the 'Painter's Award' — a separate competition wherein all those entering the show are invited to paint the same figure, the best-painted entry winning. This year John Bernier's piece was selected over seven other entries, notably well-painted runners up being by Roy Erickson and by Gary Joslyn (Swansea).

Roy Erickson also entered a wide range of well-painted kits, and earned a Silver Medal for his French Hussar. Hilbur Graf's 'Fatal Attraction', a well-painted 'fantasy' automobile, earned him a Silver, while his amusing vignette 'Bad Water' collected a Bronze.

Michael Collins showed a spectacular Historex conversion, 'Mirza Alt Garay', deservedly collecting one of only six Gold Medals awarded in the open competition. John Crane was awarded a Silver Medal for his massive assortment of Aztec figures; and Dr Richard Thom of Oregon, showing great improvement in his painting skill, gathered in several awards including a Silver for his Lawrence of Arabia figure and a second for his rendition of ARA Miniatures' Custer figure. Steven Wrakley's exhibit was one of the strongest at the show, and he earned an Outstanding Exhibitor Award for overall excellence. Steven's Conquistador figure was honoured with a Gold Medal, although virtually any of his pieces would have been worthy recipients.

One of the stars of the

show was Joe Woolf from Texas. A variety of his excellent scratchbuilt work included two caricatured GIs based on Bill Mauldin's immortal 'Willie and Joe'. Woolf won a Gold Medal, and the Judge's Award for best single open competition entry.

The California Show was pleased to welcome Gary Joslyn and Gill Watkin-Jones from Wales this year. Gary showed a wide range of figures of which the most impressive was his converted Macbeth figure, which earned a Silver. Gary's conversion abilities particularly impressed the judges, all of whom were well aware of the extensive rework that went into so much of what he showed. Gill also did well, winning a Gold Medal in the Novice competition for her Cantinière.

The California Show also

Anita the Huntress,
by Jim Johnston
(Poste Militaire kit).



Below:
Conquistador, by Brian Stewart (converted Poste Militaire kit); Gold Medal.



features a separate 'Master's' Competition apart from the Open. Masters include such names as Brian Stewart, Mike Good (both Euro-Militaire Gold Medalists), Chuck Smith, Terry Worster and Dave Kennedy.

Brian Stewart showed two brilliant pieces — a converted Poste Militaire Conquistador standing on the snake-like roots of an enormous jungle tree, and a Halberdier from Flodden Field. Both were remarkably engineered, and the mood created by the groundwork set both a cut above the rest. Chuck Smith showed a large collection of beautifully painted flats which were very popular, and collected not only a Gold Medal but Best of Show as well. Mike Good entered a very well painted 120mm Verlinden figure using a new airbrushing painting technique — to general astonishment. Grand Master Peter Twist's two scratchbuilt 90mm figures — General Andrew Jackson, and a Scots Fusilier Guards Officer in the Crimea — were very well received. Your correspondent showed a collection of 13 single figures, and vig-



Above

A Soldier's Battle: Inkerman 1854, by Bill Horan; Gold Medal exhibit.

Right:

English Halberdier, by Brian Stewart (Poste Militaire kit).

Below:

Flat by Chuck Smith, part of his collection entitled 'Holy Roman Emperors'; Gold Medal, and Best of Show.



nettes depicting the Battle of Inkerman and the Storming of Badajos.

In all, over 350 pieces were on display by approximately 70 exhibitors; and the many visitors were treated not only to some first class miniature figure modelling, but also to seminars on figure making and painting by Peter Twist and your correspondent; a raffle of a painted figure by well-known painter Larry Munne; and an auction of seven fine figures by painters from the USA and Britain.

* * *

(For information on next year's show interested readers should write to: *The California Show*, c/o Steve Sexton, 11456 Broadmead, South El Monte, CA 91733, USA.)

BB



Re-enactment:

23rd Regiment, Royal Welch Fusiliers in America (3)

JAY CALLAHAM

In 'MP' Nos. 18 and 26 the author described the Revolutionary War service of the 23rd Foot; and described and illustrated the uniforms and equipment of the officers, NCOs, and specialists of the re-created Regiment, one of the most impressive 18th century re-enactment organisations in the USA. In this concluding part he details the internal organisation and policy of the group, and lists useful suppliers of equipment and other contact addresses. We feel sure that this glimpse behind the scenes of a successful, dedicated re-enactment group will be of value to current or prospective groups in the UK.

THE RE-CREATED REGIMENT

The re-created Regiment is named the '23rd Regiment of Foot, Royal Welch Fusiliers in America' to differentiate it from the present-day British Army unit. The recently retired Colonel of the Royal Welch Fusiliers, Brigadier A.C. Vivian CBE, is Honorary Colonel of the RWFiA. The late and greatly missed S.R. Roberts, TD — mayor of Aberconwy and formerly a captain in 6RWF — was Honorary Lieutenant-Colonel until his death in November 1989. Both have done much to encourage the camaraderie which exists between the RWFiA and the present-day battalions, 1RWF and 3RWF. This culminated in the participation of the RWFiA in the tercentenary celebrations of the Regiment's founding in March 1689; the RWFiA had the privilege of providing an honour guard and of taking part in celebrations at Powis Castle on 21 April 1989 in the presence of the Colonel-in-Chief of the RWF, HM the Queen. The celebrations happily coincided with Her Majesty's birthday.

The successive commanding officers of the 1st Battalion, the staff of the

Regimental Museum at Caernarfon Castle, and many other personnel have done much to help the RWFiA in research, and to encourage their performance in America — a performance undertaken in full appreciation of the responsibility to represent the true Regiment with real professionalism.

Organisation

The RWFiA is organised geographically along military lines. The chief executive is a Major, who also commands

his own 'Major's Company', accepting men under 5ft. 10in. tall and based in the New York City area. The Light Infantry Company covers the up-state New York, Pennsylvania, New Jersey area. The Grenadier Company accepts men of at least 5ft. 10in. from the New York City, Long Island and Philadelphia area. The Colonel's Company recruits in Connecticut and New England. There are two Captain's Companies; the 1st (commanded by the author) in



Two off-duty officers, wearing (left) undress and (right) hard cocked hats. Note the double waist carriage for the sword and bayonet.

dual Company Clerks to handle the administration.

Recruitment and Promotion

Recruiting policy is that a prospective Fusilier must join the company nearest his home; he must be 14 years old to enlist as a musician, and 16 to bear arms; parental consent is required for all under 18 years of age. A Fusilier may not belong to any other Revolutionary War re-enactment group; some companies forbid membership of other re-created units of any period, but this is at the discretion of company commanders. All ranks enlist as recruits and are advanced to private upon acquisition of complete basic uniform and

continued on page 42

Left:

The bone of the military down the ages — pipe hawk . . . The author, a company commander in the RWFIA, uses a quill to fill out a form, resting on a folding lap-desk. Also on the folding table are pen-knife, sealing wax, and collapsible candlesticks. (Courtesy Laton Plantation, Charlotte, NC)

Below:

With some 20th century help, the officer prepares to shave (a task normally carried out by his servant in the 18th century). The reproduction toilet kit is authentic — badger brush, ball of soap in a clay cup, tin bowl and earthenware water-jug, ginger jar of scented sponges, wooden brushes and horn combs, etc. (Courtesy Laton Plantation, Charlotte, NC)



Maryland, Virginia, the Carolinas and Georgia; the 2nd, in Ohio, Michigan and the Mid-West. A Pensioners' Company accommodates members who wish to remain on the roster but are no longer active in the field. Current active strength is approximately 100 men.

Command

The Regimental Commander commands with the advice and consent of the other officers, representing their respective companies. An Adjutant works with individ-



(A) Officers confer in the field; one the fowls, bayonets and cartridge boxes appropriate to Fusilier officers. The fowl, with slimmer lines than the Long Land Service and Short Land Service models of the 'Brown Bess' musket (a term apparently not used until after the Revolution), is 42in. long overall, like the Short Land. It appeared in .69in. or .65in. calibres; the Long Land (.46in. overall), probably the most common weapon in the ranks, was .75in., as was the Short Land.

(B) Field officer of the re-created Regiment discussing a review with Brig.A.C. Violan, CBE, Colonel of the Royal Welch Fusiliers and Honorary Colonel of the re-created Regiment.

(C) Second in Regimental Colour of the re-created 23rd Regiment. In the blue facing colour of a Royal Regiment, it bears the devices used at the time of the Revolution, (clockwise from top left) the pre-1800 Union Flag, with gold-pointed 'XXIII'; the Rising Sun; The Prince of Wales's Coronet and Feathers on a red disc; and Y Ddraig Goch, the Red Dragon of Wales, on a lighter blue disc. In the centre is a large Coronet and Feathers with the motto 'Ieh Dreu' ('I Stand'). There is evidence that while George II commemorated his personal leadership on the field of Dettingen, 1743, by granting the 23rd among other regiments the right to display the White Horse of Hanover on their Colours, this was not in fact done until after the Revolution. (This, despite the fact that the White Horse appeared on Grenadier mitre caps and on hanger and sword grips during the Seven Years' War.)

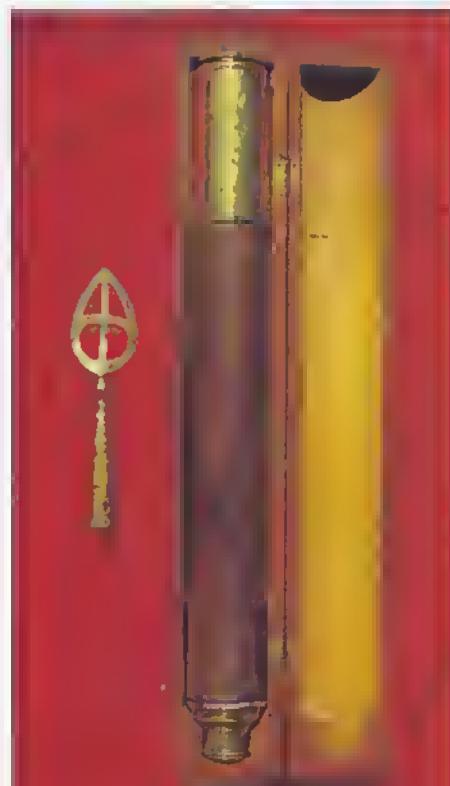
(D) Regulator design of feathers, Coronet, Motto and White Horse cast into the grip of this original model 1742 hanger, as carried by sergeants and musicians. This surviving example has been fitted to an American-made blade and counter-guard; was the English blade broken before surrender at Yorktown? . . . It is an intriguing survival, whose story will never be known.

(E) Left, an original Colour staff fowling piece of the type used during the Revolution, this example believed to have been made in Birmingham c.1770-1800. Right, an officer's nautical telescope, many field officers would have carried these in their field kit. The brass tube is wrapped in leather; it has a brass pull-out glove shield at the front, and slip-type lens protectors. The case is carved out of the solid.

(F) A well-fitted-out officer's campaign tray, complete with folding furniture, mess kits, writing kit, campaign cutlery and dining service, and a floor cloth of checkered canvas. Such complete outfitting can add enormously to the personal cost of re-enactment.



A



E



D



B



C



F

A surgeon, wearing a jutted straw hat for summer field service and a bloodstained leather apron to protect his smockclothes, weighing pills in the silver balance taken from his field kit.

field kit, and upon demonstrating proficiency in the Manual exercise of 1761 to the satisfaction of their officers. All troops are eligible to be advanced through the non-commissioned ranks by their company commanders.

Officer vacancies are filled by appointment, such appointment being by the officers with the Regimental Commander having the final decision. (While the purchase system is no longer used, it is still expensive to serve in commissioned rank . . .) The only exceptions to promotion from the ranks are in the case of specialists, e.g. the surgeons; or if a candidate were to raise a company which joined *en masse*. All current officers and NCOs hold their ranks as a result of many years' dedicated service.

Discipline and Authenticity

There is no pretence of democracy. The men, as volunteers, may have input into Regimental activities, but the officers make the decisions. An officer or NCO falling below a required standard of performance is asked to step down. Most have conducted themselves as gentlemen when obliged to be disciplined. Some have departed in high dudgeon, unregretted.

Historical accuracy forbids the recruitment of women in any capacity except that of camp-follower, in which they are welcome and make a great contribution. If a black or Oriental wishes to enlist he is welcome, on the understanding that he must portray a rôle appropriate to his race in the 18th century British Army — e.g. officer's servant, draver, etc. The life of the 18th century soldier is re-created as accurately as possible, and while some 20th century anachronisms are necessary (e.g. contact lenses,



or 18th century style spectacles), everything visible to the public must be as accurate as possible.

Activities

The Regiment comes together for the annual celebration of St. David's Day; for special Regimental functions such as the 1989 trip to Wales; and for designated Regimental events — battle re-enactments, 'living history' encampments, etc. Each company also attends various functions within its region. Generally the RWFIA member attends about 12 events a year. In addition,

company drills are held at the commanders' discretion; and officers' business meetings take place at least twice annually.

Uniform and Equipment

Patterns and sources of materials, equipment and other necessities are administered by the Adjutant and an appointed Pattern Master. The officers periodically review historical data to decide how uniform should be worn. The Pattern Master maintains copies of patterns for all items, with sources of supply, cloth samples, and other specifications which he

provides to the company tailors and seamstresses as necessary.

'THE COMPLETE FUZILEER'

The following is a listing of uniform and accoutrements necessary to a private in the re-created 23rd Regiment of Foot. Prices given here are approximate; they will vary depending upon sources, and upon whether or not kits are purchased to be completed by the soldier (or by some obliging family member or close friend . . .) All prices are quoted in US dollars.

Cap, bearskin	\$150.00
Cap cover, canvas	15.00
Forage cap	15.00
Wig, natural or white	60.00
Stock, velvet	10.00
Stock, horseshoe	15.00
Stock buckle	14.00
Shirt	33.00
Waistcoat, linen	62.00
Breeches, linen	87.00
Breeches, buckles	8.00
Stockings, pr.	7.00
Shoes, pr.	85.00
Shoe buckles	20.00
Regimental coat	295.00
Cartridge box with sling	90.00
Cartridge box badge	27.00
Pick & brush set	5.00
Waist carriage/belt	41.00
Bayonet scabbard	19.00
Brown Bess musket (reproduction)	550.00
Sling, flashguard, hammerstall	26.00
Bayonet	35.00
Haversack	20.00
Canteen	24.00
Knapsack, goatskin	100.00
Gaiters	48.00
Garters for gaiters	6.00
Knee-wraps, linen	6.00
Tin cup	5.00
Plate	5.00
Knife, fork, spoon	37.00
Total	\$1870.00
UK equivalent, approx.	£1,200.00

These items will get a soldier into the field. Grenadiers add a matchcase, hanger, and cap badge, totalling about another \$275.00. Items such as tents, blankets, camp cookware, officer's kit, and other optional extras can add significantly to the price — e.g. an officer's marquee tent can cost from \$500 to \$700 not including pins, poles or furnishings.

Suppliers

The following is a list of suppliers of various goods for the re-enactor. It is far from complete, and lists only US firms, but it will give the reader a fair cross-section.

One who deserves particular mention is G. Gedney Godwin, the 'Sutler of Mt. Misery', at Box 100, Valley Forge, PA 19481. Godwin has just about anything you could want; his prices are in line with his excellent quality, but his goods give real



value for money. (Catalogue, \$4.00; many items illustrated in this series of articles come from this supplier.) Besides authentically re-creating many impossible-to-find items necessary to the reproduction of 18th century life, he has often gone out of his way to help provide specific items. He is responsible for the re-created cartridge box plates and hanger hilts used by the RWFIA, and many other necessities.

La Pelletrie

PO Box 127, Highway 41
Arrow Rock, Missouri 65320
Proprietress Karalee Tearney specialises mostly in clothing, blankets, tools, toys and other goods c.1750-1830. She gives good advice on developing a persona. (Catalogue, \$3.00)

Jas. Townsend & Son Inc.
106 South First Street
PO Box 415
Pierceton, Indiana 46562

Jim Townsend supplies a variety of goods and clothing. (Catalogue, \$2.00)

Panther Primitives

PO Box 32
Nonnantown
West Virginia 25267
Panther provides a good selection of canvas goods, tents, bags, clothing, books and other goods. They cater more particularly for those who portray the fur trade period of the 1790s-1830s. (Catalogue, \$2.00)

For functions where period uniform would be inappropriate, the members of the RWFIA wear navy blue blazer and tie, light blue shirt and grey slacks. The tie and blazer badge are illustrated. Such 'extras' all help create esprit de corps, apart from ensuring that the good name of the group is maintained by a neat and uniform appearance at functions.

assist in defraying the cost of its activities. Donations and enquiries about associate membership should be addressed to the Adjutant: Robert Gilney, 56 Cedar Drive, Farmingdale, New York 11735.

Prospective full recruits should contact the CO, Maj. Richard Ford, 5922 Copper Avenue, Glendale, New York 11385. He will see that the appropriate company commander is untified.

The present author is always seeking new sources of information about the 23rd Foot in the Revolutionary War, and invites responses to: Jay Callahan, PO Box 13051, Greensboro, North Carolina 27415.

MI

A camp-follower wearing traditional Welsh costume.



Minamoto-no-Yoritomo

ANTHONY J. BRYANT
Painting by ANGUS McBRIDE

Minamoto-no-Yoritomo (1147-1199) is one of the more interesting and paradoxical characters of Japanese medieval history. It is easy to paint him as a man of great vision, clever and intelligent. It is equally easy to use the same brush to paint him as an unscrupulous villain, given to fearsome bouts of jealousy and consumed by a lust for power. In support of the former view one may cite the fact that he established a well-organised government, and, at the age of only 33, was able to rally sufficient allies to fight a long war for national power. The latter aspect of his character could be seen in the single-minded vindictiveness with which he pursued the destruction of his popular younger brother, without whom his cause could never have succeeded.

During Yoritomo's childhood the patterns of power in Japan had been disturbed. Since the 10th century the actual Emperors had become increasingly reclusive, and real power was manipulated by a court bureaucracy modelled on that of China. The court was dominated for generations by the powerful Fujiwara clan, who even achieved the abdication of still-young emperors in favour of more easily manipulated children. This led to the dispersal from the capital, Kyoto, of disaffected nobles with Imperial connections, who allied themselves variously to ancient provincial families who also resented the centralised power of the

Fujiwara. A number of rebellions broke out between 935 and the 1080s, involving shifting alliances of nobles. In the course of the 11th century leaders of the Minamoto clan were used by the Fujiwara government to lead armies against rebellious magnates in the north on more than one

occasion — but were not fittingly rewarded for their service.

Meanwhile, in the south, a second great clan was arising: the Taira. In 1156 shrewd dealings with allies and enemies during the short-lived Hōgen Insurrection by the ex-emperor Sutoku allowed Taira-no-Kiyomori to extend his power so successfully that the Taira virtually replaced the Fujiwara in influence. In the Hōgen Insurrection the Taira had been supported by Minamoto-no-Yoshitomo. Three years later, in the Heiji Insurrection of 1159, Minamoto allied himself with Fujiwara-no-Nobuyori against the Taira. They failed; and both were slain. Power had now passed decisively from the bureaucratic Fujiwara to the more military Taira.

THE GENPEI WAR

The seeds of this famous struggle fought out between 1180 and 1185 were sown in the mercy of Taira-no-Kiyomori towards the family of the dead Minamoto: he spared the lives of the youngest boys, two of whom — Yoritomo and Yoshitsune — would eventually prove the nemesis of his family.

In 1180 Prince Mochihito, furious at being passed over

for the Imperial throne in favour of Taira-no-Kiyomori's infant grandson, conspired against the Taira with Minamoto-no-Yoritomo, now grown to vigorous and scheming manhood. Yoritomo called up the scattered forces of the Minamoto clan and their ancient adherents from all over Japan; and agreed that, if they were victorious, Mochihito would succeed to the throne. Prominent among the samurai who answered the call to arms were Yoritomo's younger brother Yoshitsune — who had been brought up apart from him — with several famous vassals.

The Genpei War takes its name from the different possible readings of the characters for the clan names: 'Taira family' can be read as *Heike*, and 'Minamoto clan' as *Genji*, and these names are used in Japanese for the two sides in the war, the combination being rendered as *Genpei*. Sources suggest that the Taira/Heike were seen as a cultured and artistic, as well as a warlike family, who had close marriage-ties with the court. The Minamoto/Genji were characterised as vigorous rustics.

The war was prosecuted without mercy, and several major battles were soon



A modern reconstruction of Yoritomo, a detail from a screen painting depicting a meeting between Yoritomo and Yoshitsune on campaign. In this view Yoritomo's helmet is shown fitted with a huge gilt crest, kuwagata. His armour is displayed in the background, but he wears the armoured left sleeve, kote. (Ookura Shinkokan)

fought. In 1180 the Taira forces were eventually victorious in a hard-fought battle at Uji Bridge, over warrior-monks (*sōhei*) from the pro-Minamoto temple at Todai-ji. In revenge for their opposition Taira-no-Kiyomori put the temple to the torch, with the loss of some 3,500 lives; and soon afterwards he died — some said, as divine punishment for this act. But the Taira forces continued to campaign, and in 1181 the death in battle of the pretender Prince Mochihito nearly spelled disaster for the Minamoto. Yoritomo played a major part in keeping the cause alive.

An organiser, politician and strategic commander more than a tactical leader, Yoritomo left the conduct of operations to his brother Yoshitsune, and to their cousin Minamoto Kiso-no-Yoshinaka. This latter, a colourful warrior, was accompanied even into battle by a formidable wife, Tomoe Gozen.

In 1182 Yoshinaka inflicted a severe defeat on the Taira, and captured Kyoto. He pronounced himself shogun — an illegitimate appointment to which he had no right, and which enraged his cousin Yoritomo — and proceeded to visit a reign of terror on the capital. From this point Yoritomo seems to have regarded cousin Yoshinaka as expendable. From his headquarters at Kamakura, where he maintained control of general strategy, Yoritomo took advantage of the temporary retreat of the Taira to send his brother Yoshitsune against their over-mighty cousin. The young hero defeated Yoshinaka in 1184; Yoshinaka fled, but was caught and killed — legend has it that his warrior wife Tomoe Gozen killed some of his attackers before fleeing to a temple and becoming a nun.

Meanwhile the Taira forces had occupied an easily defended natural position called Ichi-no-Tani, protected by cliffs to the north and a harbour full of Taira shipping to the south. On the night of 18 March 1184 Yoshitsune led some 200 picked shock-

troops in a death-defying charge on horseback down the sandy, almost vertical cliffs. The Taira, expecting attack from east or west only, were taken by surprise and routed with great loss.

In 1185 the Taira were finally defeated in the naval battle of Dan-no-Ura. The disaster was so complete that when Yoshitsune's victory was seen to be unavoidable all the leading members of the Taira clan — including the widow of Taira-na-Kiyomori, carrying her grandson the child-emperor Antoku — committed suicide by leaping overboard.

THE INGRATITUDE OF PRINCES

Yoritomo, as head of the Minamoto clan, reaped the rewards of the battle exploits of his younger brother. Now that he was unchallenged by any external threat, his dark mind turned to his brother's great renown. Yoshitsune had entered Kyoto as a liberator, and was appointed *kebiishi*, a post analogous to national police chief which carried considerable independent powers. It is said that other Minamoto generals, jealous of the young hero, whispered in his brother's ear. Whatever the reason, Yoritomo gave orders for Yoshitsune's destruction.

For almost five years the young general and a small band of faithful followers were hunted throughout Japan. One by one they were trapped and killed; and in 1189 Yoshitsune himself was cornered, and committed suicide. Legend has it that his pursuers were held at bay by a last vassal, the giant warrior-monk Muishiba Benkei.

* * *

In 1192 Minamoto-no-Yoritomo was proclaimed *sei-i-tai-shogun*, and set about forming his new government; it was significant that this was a military-style regime under a *shogun*, rather than the previous civil form under a *kaizaka* or court prime minister. The so-called Kamakura *bakufu* had begun: the term means 'tent

Angus McBride's reconstruction shows Yoritomo in an amour which still survives in superb condition in a Japanese shrine and which is attributed to him; it is of a style and quality entirely credible for his period and status.

The armour style is called *ō-yoroi* or 'great armour'. It is made up of over a thousand metal leather seals called *zane* tied rigidly into ornate boards by leather thongs, which were then reinforced solid by several applications of black lacquer. The boards were then laced to those above and below by rows of suspensory braid, which could be either dyed leather or, as in this case, brightly coloured broad silk twill. Yoritomo's helmet is *konito-odoshi* or blue silk twill. The *tsuru* is a fairly rigid C-shape, open on the right side; three wide skirt-plates, *kusazuri*, are suspended from the *tara*. To protect the unprotected right side a solid *wakidate* is worn under the arm with the fourth skirt-plate pendant from it. The huge shoulder guards, *ō-sode*, free the warrior from the need to carry a shield when on horseback.

He wears a single unarmoured sleeve, *kote*, on his left arm; although having metal plates and mail, its purpose was as much to hold the baggy sleeve of the armur-robe out of the way of the bowstring as to protect the arm. Here it is patterned with Yoritomo's mon or heraldic symbol in gold, repeated on green silk. There is no thigh armour, as warfare was generally mounted at this period and there was less need for protection in that area. He wears green, suncale, and short brashkin shoes.

His kabuto or helmet bears no crest. At this early period only the highest ranks wear them, and even

then not always. The helmet bowl is of typical multi-plate construction with huge, knobbed rivets; a hole at the crown, *tenen*, is decorated with a gilded rim. Through this Yoritomo, following the style of his period, has pulled the tip of his black cloth cap. His neck is protected by the helmet's *shikoro* or cape-neck guard, and large *sukigashii* or 'blow-holes' are attached to the front of this. Various surfaces on the helmet and torso — notably the *tsurubashiri* chest protector, the *wakidate*, and the pendant upper chest guards *kyubi no ita* (right) and *sendan no ita* (left) — are decorated with patterns on printed leather. A *nodowa* throat guard is worn underneath the armour and is thus invisible.

Suspended on his left side at the waist would be a wickerwork reel for an extra bowstring; and thrust into the sash is a long, heavy-bladed knife, useful for stabbing through armour at close range as well as for removing the head of a fallen enemy. The ornate *tachi* sword is worn from its own cord over the sash, in the edge-down position typical of the period. The weapon of choice is the great bow with its off-centre grip. The fur-faced quiver, a sign of status, bears Yoritomo's mon and contains arrows of every design and function. Among these were usually found two or three special arrows, made longer and more ornate, often used for signalling or for shooting at a particular foe.

The armour is worn over a batik-robe with huge, billowing sleeves and broad-cut culotte-like trousers, both confined by cords at wrist and ankle. The en suite patterning of this heavy silk costume is typical.

government', and implies a mobile military headquarters.

Yoritomo streamlined the process of government to some extent, transferring power from civil bureaucracies to new, military administrations. (The post of *kebiishi* was largely dissolved, perhaps significantly.) While maintaining central control in his hands, Yoritomo was realistic enough to recognize the dangers, and devolved some local powers to a looser network of provincial lords. (Yoritomo was a very capable administrator; but his cold ruthlessness showed no sign of mellowing, and he prudently had his remaining brother put to death.) A more or less parallel machine of

government evolved, based at Kamakura, while the Emperor and court aristocracy remained isolated at Kyoto.

In 1199, at the age of 52, Yoritomo was killed in a riding accident which was inevitably seen as the retribution of heaven for the killing of his brothers. This untimely death left the new dynasty without an adult leader and still only weakly established. Yoritomo's son Yoriie was a puppet in the hands of his powerful maternal grandfather Hōjō Tokimasa, who eventually had both Yoriie and later his younger brother Sanetomo assassinated. Tokimasa held power as regent; and the Minamoto's brief dominance was over. **MI**

Minamoto-no-Yoritomo

c.1182

